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#### APPLICATION OF

## OLD DOMINION ELECTRIC COOPERATIVE<sup>1</sup>

CASE NO. PUE-2002-00003

For a certificate of public convenience and necessity for electric generating facilities in Fauguier County

## REPORT OF MICHAEL D. THOMAS, HEARING EXAMINER

## August 22, 2002

## **HISTORY OF THE CASE**

On December 28, 2001, Old Dominion Electric Cooperative ("ODEC"), acting as the sole and managing member of Marsh Run Generation, LLC ("Marsh Run") (collectively "Old Dominion"), filed an Application with supporting testimony and exhibits requesting that the State Corporation Commission (the "Commission") grant ODEC a certificate of public convenience and necessity ("CPCN") pursuant to § 56-265.2 of the Code of Virginia to construct a new 696 MW natural gas-fired, single-cycle electric generation facility (the "Facility") at a site located in Fauquier County, Virginia (the "County").<sup>2</sup>

On February 7, 2002, the Commission entered an Order for Notice and Hearing requiring Old Dominion to provide public notice of its Application, establishing a procedural schedule for the filing of testimony and exhibits, assigning the matter to a Hearing Examiner, and scheduling an evidentiary hearing for May 21, 2002.

On March 21, 2002, Piedmont Environmental Council ("PEC") filed a request to be granted status as a respondent in this proceeding. On April 16, 2002, Old Dominion filed a motion requesting denial of this request. By letter filed April 18, 2002, the PEC withdrew its request.

<sup>&</sup>lt;sup>1</sup>This case should have been correctly captioned, Application of Marsh Run Generation, LLC. Marsh Run Generation, LLC ("Marsh Run") is the legal entity that should hold the certificate of public convenience and necessity for the electric generating facilities in Fauquier County. Marsh Run is the entity that is borrowing the money, paying the cost of construction, and will own the Facility. Old Dominion Electric Cooperative ("ODEC") is supervising the construction and will operate the Facility. Marsh Run should hold all of the environmental and operating permits, and there should be an operating agreement between Marsh Run and ODEC. Even though ODEC is the sole member of Marsh Run, ODEC should be required to recognize that it and Marsh Run are separate legal entities. <sup>2</sup>The Commission has determined that the Virginia Electric Utility Restructuring Act ("Act") operates so that the provisions of the Act relating to generation supplant Va. Code Ann. §§ 56-234.3 and 56-265.2 B on and after January 1, 2002. See, Commonwealth of Virginia, ex rel. State Corporation Comm'n, Ex Parte: In the matter of amending filing requirements for applications to construct and operate electric generating facilities, Case No. PUE-2001-00313, D.C.C. No. 010810174, Order at 3, 5-6 (Aug 3, 2001). See also, Application of Tenaska Virginia Partners, L.P., Case No. PUE-2001-00039, Final Order at 11-13 (April 19, 2002).

On March 22, 2002, Columbia Gas of Virginia, Inc. ("Columbia Gas") filed a notice of participation as a respondent in this proceeding.

Pursuant to the Commission's Order for Notice and Hearing, written comments were timely filed by the Fauquier County Board of Supervisors.<sup>3</sup>

On May 21, 2002, the evidentiary hearing was convened as scheduled. John A. Pirko, Esquire, James Patrick Guy II, Esquire, and T. Borden Ellis, Esquire, appeared on behalf of Old Dominion. Katharine Austin Hart, Esquire, appeared on behalf of the Commission's Divisions of Energy Regulation and Economics and Finance (the "Staff"). M. Renae Carter, Esquire, appeared on behalf of Columbia Gas. At the commencement of the hearing, Columbia Gas offered a stipulation to which Old Dominion and Columbia Gas had agreed, and the Staff had no objection. (Ex. 1). Fourteen public witnesses testified at the hearing.

At the conclusion of the hearing, the parties were directed to file a joint issues statement identifying for the Commission the issues that need to be addressed in this case. Old Dominion and the Staff filed a joint issues statement on May 30, 2002.

A copy of the transcript is being filed with this Report.

### **SUMMARY OF THE RECORD**

### Written Comments

The Fauquier County Board of Supervisors expressed its support for the Facility. It stated it had worked with Old Dominion to mitigate the land use, traffic, and environmental impacts of the proposed Facility. The Board of Supervisors requested the Commission's positive consideration of Old Dominion's Application.

#### Public Witnesses

Fourteen public witnesses testified at the hearing. Thirteen public witnesses spoke in favor of the Facility and one spoke in opposition.

Ms. Sharon Groves McCamey lives in the Sumerduck area of the County. She is a member of the Board of Supervisors and testified that she was speaking on behalf of the Board. The proposed Facility would be in the district Ms. McCamey was elected to represent. (Tr. at 7-8).

<sup>3</sup>Delegate Mark L. Cole also filed written comments. However, his comments were not timely filed and were, therefore, not considered in the determination of this case.

<sup>&</sup>lt;sup>4</sup>The Stipulation recognizes that a natural gas lateral will be constructed by either Columbia Gas or Transcontinental Gas Pipe Line Corporation ("Transco"), and that Old Dominion shall construct, own and operate plant piping between the meter station and the Facility, which piping is not to be used to serve other facilities without Commission approval. In the event that the gas lateral is owned by an entity other than Transco, Old Dominion will notify the Commission, or, if required by law, file an application and serve a copy of such application or any required notice on Columbia Gas.

Describing the approval process for the Facility, Ms. McCamey explained that the review of Old Dominion's Application was very thorough. Already having one generating facility in the County, she stated the Board gave a great deal of care to considering the placement of a second one. The process took many months and was very well publicized. Citizens were actively involved on both sides of the issue, and citizen input was weighed heavily by the Board. Among other issues, the Board considered jurisdictional questions, local land use concerns, and air quality. As part of its evaluation process, the Board examined the air quality modeling provided by Old Dominion. The Board also posed many questions regarding the need for the Facility. All of the Board's questions were satisfactorily answered, and the County is satisfied that their review criteria were met. Ms. McCamey noted that a clear majority of her constituents were in favor of the Application. (Tr. at 8-9).

Ms. McCamey indicated that, during the construction of the Virginia Power generating facility in the County, there had been problems with construction traffic impacting a nearby neighborhood. She pointed out that Old Dominion has gone out of its way to address potential traffic problems during construction of its Facility. (Tr. at 9, 12).

On cross-examination, Ms. McCamey explained that to help mitigate the impact of development, Old Dominion voluntarily agreed to fund a program in the County which will purchase development rights to keep certain land from being developed and keep the area agricultural. The area to be covered under the purchase development rights program would be within a five-mile radius of the Facility. Old Dominion is obligated to fund the program. (Tr. at 10).

Ms. McCamey indicated it was her understanding that Old Dominion may build only on up to 60 acres of the 252-acre site. The remaining acreage would be left as open space. She believed it may be used as an outdoor recreational area. There is no prospect that residential housing will be built near the plant. (Tr. at 11).

Mr. Thomas Norman Harris testified on behalf of PEC, located in Warrenton. Mr. Harris questioned the need for the Facility and whether Virginia needed another power plant. He found it perplexing that Virginia Power would not continue to provide power to ODEC when they are partners in the Clover and North Anna power plants. He also questioned why Virginia Power terminated its present power supply contracts with ODEC. Mr. Harris stated that such termination did not make sense to him since Virginia Power's new generation plant at Remington is underutilized and its Caroline County power plant operated only a few hours last year. He believes a reasonable power supply contract could be worked out between the two entities. (Tr. 13-14).

Mr. Harris pointed out that ODEC has a contract with Williams Energy Marketing and Trading ("Williams") to supply 490 megawatts of electricity. He believes there are other suppliers available to ODEC. Even without the energy from Williams, Mr. Harris stated ODEC's Louisa County and Rock Springs plants will generate enough capacity to serve 900,000 customers, more than twice ODEC's current customer base. Mr. Harris believes the Louisa and Rock Springs plants provide an excessive margin of peak demand reliability eliminating the need for an additional facility in Fauquier County. He asked the Commission to be aware that there are 24 proposed or recently constructed power plants in Virginia. He stated Virginia's peak demand last summer was

19,439 megawatts, and there are 21,000 megawatts, including Mt. Storm, currently in operation. Mr. Harris stated there are companies struggling to find purchasers of power from their Virginia plants. Others companies, like Virginia Power, have plants sitting idle. Given these facts, Mr. Harris wonders how many power plants Virginia, or ODEC, really needs. (Tr. at 13-15).

On cross-examination, Mr. Harris was asked to explain the basis of his calculation of ODEC's capacity to serve 900,000 customers. He admitted that he had had a hard time getting a solid answer. He indicated that one report he read stated that one megawatt would serve 300 customers, or homes; yet an article in the *Boston Business Journal* indicated one megawatt would serve 1,000 homes. Mr. Harris stated he chose a value of 500 customers because it was in the middle of the two values. (Tr. at 16-17).

Mr. Harris questioned Old Dominion's statements in its prefiled testimony that pollution from the plant is insignificant. He argued that the County will likely become a non-attainment area and that any large contribution of pollutants is significant. He noted that Old Dominion would contribute 249 tons of pollutants, which he stated equates to 12,234 new automobiles, or an increase of 6,117 in the County's population. He pointed to the Environmental Protection Agency's ("EPA") definition of major source as producing 250 tons of Nitrogen Oxide ("NO<sub>x</sub>) annually. Mr. Harris concluded that adding Old Dominion's minor source plant's pollution to the existing Virginia Power minor source plant, which is 800 yards away, would be the equivalent of a major, or significant, pollution source. He stated that to Old Dominion's credit, Old Dominion has agreed to find one-to-one offsets for NO<sub>x</sub> emissions, but Mr. Harris is concerned about from where the offsets will come. (Tr. at 22-23).

Mr. Harris stated the Facility is a power plant sandwiched between an agricultural and a forestal district. He believes approval of the Facility would be in conflict with the goals of the agricultural district, but clarified that the site is not actually situated within an agricultural or forestal district. Of further concern to Mr. Harris are Native American scatters, a campsite and village, and five archeological sites on the Old Dominion property that may be eligible for nomination to the National Register of Historical Places. He questioned what kind of use would be allowed in the open spaces of the site. When questioned from the bench, Mr. Harris agreed that a nature trail with interpretive markers would be a great use for the remaining acreage. (Tr. at 25-29).

Mr. Thomas T. Grady testified that he is a registered professional engineer and resident of Fauquier County. He indicated that he has been involved with the design, set up, and operation of power and other industrial plants since 1974. Mr. Grady further indicated that Old Dominion had shared all its test data with him, and he believes the Facility will have no significant impact on the quality of life in the County. Mr. Grady believes that peaking units such as the Facility are needed, explaining that they reduce pollution in our environment by providing energy formerly produced by coal-fired power plants. (Tr. at 31-32).

Mr. George Robert Lee, the chief administrative officer for the County, testified on behalf of the County. He commented that the Facility was subjected to intense scrutiny. Mr. Lee explained that the County had been criticized for hastily approving the first peaking plant located in Fauquier; and consequently, this review was a very deliberative process. The application was filed in June of 2000, and was not approved by the Board of Supervisors until October of 2001. During that time, there was a protracted period of work sessions and public meetings. Additionally, the County

considered the Department of Environmental Quality's ("DEQ") testimony regarding air quality in its deliberations. (Tr. at 34-35).

Mr. John R. Meadows, a lifelong resident of the County who resides in Bealeton, testified that he is comfortable living and working within a five-mile radius of both the proposed Facility and the existing Virginia Power facility. He clarified that the land Old Dominion purchased for the site is about 280 acres. Sixty acres, about 22% of the total site, will be used for the Facility. The remainder of the property will be protected by a permanent conservation easement. Mr. Meadows believes the conservation easement is very important to the County to remain a rural agricultural area. (Tr. at 36-37).

After speaking with the County Treasurer, Mr. Meadows stated that it would take 1,400 new businesses, each grossing one million dollars, to equal the yearly tax revenue from Old Dominion to the County. Additionally, it would take 280,000 new residences to support those 1,400 businesses. Mr. Meadows indicated his belief that the Facility will not cause a significant impact on the water supply, since Old Dominion will be using water from the County's sewage treatment plant. Additionally, the Facility will not impact air quality given the number of cars that will be kept off the road by having the remaining land at the site under a conservation easement. (Tr. at 37).

On cross-examination, Mr. Meadows explained the area would remain zoned as agricultural with a special use permit for the Facility. (Tr. at 40).

Donna R. Grove, another lifelong citizen of the County residing in Somerville, stated that her family has farmed southern Fauquier for over a hundred years, and voiced her support for the Facility. Ms. Grove, a 4-H leader, attested to Old Dominion's continuing support of the 4-H program and the entire community. She thinks Old Dominion will be a wonderful neighbor. As a member of the Fauquier Citizens for Co-Op Power, Ms. Grove volunteered to gather signatures for a petition supporting the Facility. She testified that she was able to collect signatures easily, stating that 100 of the 102 people she approached gladly signed. A number of citizens approached her asking for petitions that they too could circulate. Ms. Grove stated that people from all over the County have indicated their support for the Facility. She believes the silent majority has finally spoken to voice its support. (Tr. at 42-44).

Ms. Valerie G. Huffman resides in Bealeton and testified as a concerned citizen in favor of the Facility. She explained that Old Dominion has been genuinely supportive in responding to the citizens' questions. She believes the County has done a superb job in asking the right questions and getting the right answers. As the owner of a greenhouse, she stated that her business could be affected by pollution, but she does not believe the Facility will have any effect on her business. She sees no reason why the Facility should not be built. (Tr. at 46).

Ms. Susan Eicher Thomas, another Bealeton resident and lifelong citizen of the County, is a member of the Fauquier County Economic Development Association ("EDA"), the Bealeton Comprehensive Committee, and the secretary for the Southern Fauquier Business Owners Association ("SFBOA"). She expressed her wholehearted support for the Facility, explaining that the Facility met all EDA criteria established for economic development, such as low impact and good tax revenue. (Tr. at 47-48).

Mr. R. Carl Faller, a lifelong resident and 30-year business owner in Bealeton, testified in support of the Facility. Mr. Faller's business holdings include several residential units near the proposed Facility. He believes the Facility will not be a detriment to his property, or the community. (Tr. at 49-50).

Mr. Frank Daniel Ashley, a long-time resident of the County and a retired dairy farmer, testified that Old Dominion has proven to be a good neighbor, and he looks forward to working with it in the future. He urged the Commission to grant the permits needed for Old Dominion to move forward and produce efficient electricity for the County and the surrounding area. (Tr. at 51).

Mr. Neil Selby, a resident of Remington, expressed his support for the Facility. Mr. Selby lives directly across the street from the Virginia Power facility in the County. He leases Virginia Power's remaining acreage, which he uses for a hunting preserve, a training kennel for dogs, and farming. Although Mr. Selby was initially concerned that the Virginia Power facility would affect his business, he found that his business grew by almost 20%. He indicated that Virginia Power did a good job landscaping its site, and he believes Old Dominion will do the same. Mr. Selby's home is near Virginia Power's oil loading facility. He has neither heard, nor smelled, anything coming from the facility. He believes the County will benefit from Old Dominion locating there. (Tr. at 52-53).

Mr. Chester Wayne Stribling, of Bealeton, testified as a lifelong resident of southern Fauquier County, a 25-year employee of his family business in the County, and president of SFBOA. He expressed his support for the Facility. Mr. Stribling indicated his belief that citizens served by cooperatives in the County should have the same opportunity for affordable and reliable electricity, especially during peak time, as those served by Virginia Power. Mr. Stribling testified that, after speaking with many citizens concerned about the issue, he and others formed Fauquier Citizens for Co-Op Power, in an effort to obtain information regarding the Facility. The group held four meetings allowing citizens to ask questions and raise concerns with the Old Dominion representatives present. (Tr. at 55-57).

Mr. Stribling testified that the SFBOA, which represents over 100 businesses, is promoting and encouraging businesses that have low impact, low cost, and represent clean economic growth for the County. He noted that SFBOA views the Facility as a business that will produce positive tax revenue without requiring the County to build more schools or roads, or provide additional services such as police or fire protection. Mr. Stribling further noted that SFBOA sent letters in support of the Facility to both the County Board of Supervisors and the Planning Commission. (Tr. at 57-58).

Mr. Dell Ennis, a resident of Midland who grew up in southern Fauquier County, testified in support of the Facility. Mr. Ennis explained that through zoning the County has chosen what it wants to look like; 85% of the County is zoned for agriculture. Mr. Ennis stated that the Facility is a "perfect fit" for that vision. He noted that when Old Dominion first proposed the Facility, the members of the Board of Supervisors were opposed to it. Mr. Ennis remarked that other developers became frustrated with the process and abandoned their plans, but Old Dominion continued with the process. Through Old Dominion's efforts and, as citizen support continued to grow in favor of the Facility, he noted that the Board of Supervisors changed its opinion of the Facility. Mr. Ennis also

noted that Old Dominion customers would benefit from the Facility through favorable monthly rates, even if the power is not specifically used by them, but rather is sold to other faster growing counties. (Tr. at 59-62).

Ms. Cindy Burrell DiSanza, a resident of Sumerduck, indicated that she lives just a few miles from the proposed Facility. She and her husband strongly support Old Dominion and the Facility. When they first started looking into the Facility, Ms. DiSanza and her husband heard frightening statements from PEC, PEC supporters, and the newspapers. Yet, they were also given favorable information from other citizens supporting the Facility. This led to some confusion on their part. Their confusion led them to an independent investigation and consultation with engineers about the issues. They found that Virginia Power's peaking plant had run for four days in the prior year, and it produced 1.04 tons of NO<sub>x</sub> out of the 249 tons that it is legally allowed to emit. By comparison, they calculated that if all the cars in the County were driven an average of 13,000 miles per year, they would produce 1,654 tons of NO<sub>x</sub> per year. The two power plants combined NO<sub>x</sub> emissions were not even close to this number. (Tr. at 63-65).

As for impact on the area's land use, Ms. DiSanza stated that Old Dominion's plans to use only 60 acres and place the other 220 acres into a conservation easement is an excellent land use. She contrasted the Facility's land use with that of a large subdivision, which would not generate enough tax revenue to cover the costs of education and other needs such developments generate. Ms. DiSanza and her husband were also impressed that Old Dominion offered \$1.5 million to fund a purchase development rights program. She believes that program will protect other farmland in the area from development. Ms. DiSanza pointed out that Old Dominion's operation directly benefits 20,000 Fauquier citizen Cooperative members, their electrical needs, and their budgets. (Tr. at 66-68).

Ms. DiSanza stated that Old Dominion has proven to be a good and generous member of the community. She noted that it is a member owned, not-for-profit organization created to provide rural members with power when it was not profitable enough for any corporate provider to do so. Ms. DiSanza cautioned the Commission not to underestimate the value of reliable electricity service to citizens and businesses. She had personal experience with power supply problems in California, and when she flicks the switch, she wants power. (Tr. at 68-69).

### *Testimony and Evidence of Old Dominion*

Old Dominion presented the testimony of four witnesses: Kenneth F. Alexander, vice president of Asset Development and Production for ODEC; Peter F. Gallini, director of Power Supply for ODEC; David N. Smith, manager of Environmental Licensing and Compliance for ODEC; and Paul F. Greywall of Trinity Consultants, Inc.

In his prefiled direct testimony, Mr. Alexander described the proposed Facility and its ownership structure. Construction of the Facility will be supervised by ODEC and is expected to commence in March 2003. The project is expected to be financed through a Rural Utility Service ("RUS") loan guaranty. Once built, Marsh Run, a non-profit cooperative of which ODEC will be the sole member, will own the Facility. ODEC and Marsh Run will enter into a take-or-pay contract for the entire output of the Facility. The cost of purchased power under the contract with Marsh Run will be an annual expense for ODEC. The cost of the construction is projected to be \$288.6

million, which equates to \$415 per kilowatt based on the lower summer rating. The Facility will be located on a 280-acre site in the County, which was chosen after a yearlong four-state site selection study. It is near a Transco gas pipeline and a Virginia Power transmission line facilitating its interconnection. (Ex. 2, at 2-10; Tr. at 97).

The Facility will have four GE type 7FA simple cycle turbines, which will be powered primarily by natural gas with fuel oil as a backup fuel source. Mr. Alexander testified that one of the most heavily weighted criteria in the selection of the GE Type 7A turbines was their low emission technology and their ability to meet lowest available emission rate ("LAER") standards. Fuel for the project will be delivered by a natural gas pipeline, with oil storage tanks for the backup fuel. Inlet air conditioning will improve the efficiency of the units during warm weather. Treated discharge from the Fauquier County Water and Sanitation Authority's Remington waste treatment plant will be used for the inlet air conditioning. The water will be piped to the site for this purpose. A raw water storage tank will be located on-site and will provide adequate reserves for on-site fire protection. The site will also have a two million-gallon storage tank for demineralized water to suppress NO<sub>x</sub> formation when the units are burning oil. (Ex. 2, at 6-9; Tr. at 97-98).

Mr. Alexander testified the County Planning Commission ("Planning Commission") conducted an exhaustive review process that included three work sessions and two public meetings. Old Dominion's application for a Special Exception under the County zoning ordinance and Amendment of the Comprehensive Plan ("Special Exception") was considered by the Planning Commission on May 31, 2001. The Planning Commission recommended approval subject to certain conditions. The Board of Supervisors considered the application and the Planning Commission's recommendation at a public hearing on August 20, 2001, and granted the Special Exception at its meeting on October 15, 2001. (Ex. 2, at 10-11; Tr. at 98).

At the hearing, Mr. Alexander clarified that originally the site for the Facility had been 252 acres with only 60 acres to be developed. However, responding to the concerns of the community regarding traffic, Old Dominion acquired 28 more acres to use as an entrance road from the Virginia Power plant site to avoid any traffic problems. (Tr. at 99).

Mr. Alexander addressed PEC's claims that the Facility will create excess generation and its assertions that ODEC's needs could be satisfied from other, existing underused resources. He explained that PEC's claims reflect a lack of understanding of electric generation, transmission, and the function of peaking units. He explained the proposed Facility is a peaking unit, which will help ODEC meet its capacity obligations at peak times, primarily in the summer. Peaking facilities are not built to meet base-load requirements. Most of the time, purchased power from base-load and intermediate units will supply the energy requirements for ODEC's customers. Mr. Alexander countered PEC's suggestion that since Virginia Power's peaking units run only a few hours each year, Virginia Power has excess capacity available for purchase by ODEC. He explained that peaking units are an option of last resort, because they are expensive to operate. They are used only to meet capacity needs during peak times, when other sources of power are either unavailable or unacceptably expensive. (Tr. at 100-102).

Mr. Alexander testified that, since the Facility will be connected to the Transco system and only a small percentage of that system's capacity serves Virginia customers, the Facility should

have no appreciable effect on the availability of natural gas to Virginia customers. Mr. Alexander further testified that gas rates for Virginia customers should be positively affected because operation of the Facility will increase the load factor on the interstate pipeline. Higher load factors lower pipeline unit costs, which regulated companies ultimately share with customers in the form of rate reductions. Mr. Alexander testified that the building of other generation projects should also have a positive impact on rates for Virginia customers. These power generation loads provide an impetus for expansion and seasonal load balancing opportunities that should result in lower rates, expanded capacity, and more reliable service. Additionally, the Facility will have no impact on water rates, since it will use well water for potable water. Its water use would be less than that of a typical household. Wastewater from the wastewater treatment plant will be used for the production equipment. There will be no impact on sewer rates, because all costs of the pipelines and modifications, as well as incremental operation costs will be borne solely by Old Dominion. Electric rates for Cooperative customers will be substantially benefited, and the rates of other Virginia customers will not be adversely impacted. In addition to the benefits to the local economy from property tax payments, the Facility is estimated to bring \$63 million in economic benefit to the local and state economies over the construction period. (Tr. at 102-106).

Mr. Alexander testified that the 60-acre plant site would be designed so that the remaining 220 acres surrounding the site could be used as a buffer between the Facility and its neighbors. He also indicated that Old Dominion has no objection to the Commission putting a two-year sunset provision in its application. (Tr. at 106-107).

On cross-examination, Mr. Alexander stated Virginia Power notified ODEC in writing that it was exercising its rights not to renew the power purchase contracts, without providing a reason. He did, however, mention that it was verbally expressed to ODEC that Virginia Power did not wish to continue to service ODEC's loads at regulated rates, but rather would be willing to do so only at market rates. Under its Federal Energy Regulatory Commission ("FERC") formula, ODEC will pass on the fixed and variable costs of the Facility to its member systems. As for an increase in rates, he indicated that the cost of constructing the Facility was significantly less than costs incurred to purchase capacity needed between the time of Virginia Power's contract termination and completion of the Facility. Mr. Alexander explained that ODEC usually preferred to purchase power in the market rather than build facilities. However, after going through a bidding process and evaluating bids from market suppliers, the most cost-effective choice was to pursue a self-build option. (Tr. at 108-109, 112).

Mr. Alexander indicated that Old Dominion has not yet selected an Engineering, Procurement and Construction ("EPC") contractor. The use of an EPC contractor is a standard practice for construction of such a facility. Similar to the contracts for its Rock Springs and Louisa facilities, Old Dominion retains the right to ensure that the construction of the Facility meets all regulations, conditions and permit requirements. If there is a disagreement, Old Dominion reserves the right to interpret and enforce the requirements regarding any such issues and leaves the contractor the right to adjust the price of construction accordingly. Additionally, Old Dominion will maintain a qualified construction management staff to oversee the operation of the EPC contractor, as well as a resident site supervisor for quality control. (Tr. at 113, 116-117).

Finally, Mr. Alexander explained that the combustion turbines to be used at the Facility were designed to meet both the best available control technology ("BACT") standard and the lowest achievable emissions rate ("LAER") standard. Although the Facility is in an attainment area and BACT is the standard to be met, Old Dominion voluntarily chose to install turbines that actually exceed that standard and have met LAER standards. They are the same type of turbines being installed at ODEC's Rock Springs facility, which is in a non-attainment area and must meet the LAER standard. Mr. Alexander noted that the cost of the technology is not a criterion in determining LAER. He testified that Old Dominion will not alter the operation or emission standards of the units with regard to the LAER determination, and intends to operate the turbines as they are operated in a non-attainment area to meet the higher LAER standard. (Tr. at 110, 114-117).

In his prefiled testimony, Mr. Peter F. Gallini discussed ODEC's 1999 Requests for Power Supply Proposals ("RFP") that led to selection of the Facility as the best means to meet a portion of ODEC's future power supply needs. Mr. Gallini testified the need for the Facility grew out of the expiration of contracts for purchases of capacity and energy from Virginia Power. These contracts will be phased out over the 2002 to 2004 timeframe. An attachment to his prefiled testimony compares projections of ODEC's peak demand with capacity resources, demonstrating ODEC's need for the Facility. The attachment also demonstrates that even with construction of the Facility, ODEC has additional power supply needs. (Ex. 3, at 6-9, Attachment PFG-1; Tr. at 122-23). Mr. Gallini testified that, in an attempt to find a cost-effective way to meet future capacity and energy needs, ODEC issued an RFP on September 1, 1999. ODEC published ads for the RFP in regional newspapers, issued a press release, and sent letters of invitation to approximately 240 companies, which had previously expressed interest in bidding. ODEC received 26 responses from four different bidders. (Ex. 3, at 2-4; Tr. at 122-123).

During the process, ODEC also developed a self-build option based on the development of three generation facilities, two in Virginia and one in Maryland. ODEC developed detailed cost estimates for construction of the facilities. These estimates with supporting information were filed with Commission Staff, under seal, prior to the deadline to receive bids. ODEC evaluated the proposals and the self-build option in a manner complying with the Commission rules on competitive bidding. This methodology was developed prior to receipt of the bids. The bids and self-build options were evaluated on both cost and non-cost criteria. The evaluation process identified two bids as the best resource for ODEC's short-term needs, and the self-build option, including the Facility, as the best resource to meet long-term needs. ODEC filed a report on its 1999 RFP with Commission Staff. (Ex. 2, at 3-6; Tr. at 123).

On cross-examination, Mr. Gallini stated that, although a self-build option was being considered, ODEC did not desire to build a generation facility. He stated that ODEC wanted to see if there was a better alternative than building a facility, and actively considered the possibility of completely meeting its power needs through purchased power contracts. He also indicated that if the Facility's application were to be denied, ODEC would be forced to look to the market and issue another RFP. (Tr. at 125-126).

In his prefiled direct testimony, Mr. David N. Smith described the environmental permitting and licensing process, as well as the environmental impacts of the construction and operation of the

Facility. Mr. Smith testified that emissions from operations at the Facility would not significantly impact air quality. He explained that the combustion turbines to be used at the Facility produce the lowest concentration of pollutants of any combustion turbines of their size now commercially available. As peaking units, the turbines will operate only during the hottest and coldest days of the year, when demand is highest. The use of natural gas as the primary fuel, coupled with the limited number of operating hours, will result in a low volume of emissions. Mr. Smith testified that Burns & McDonnell, Inc., performed an Environmental Analysis (attached to Mr. Smith's testimony), including required air dispersion modeling using approved DEQ and EPA methods. The results of the modeling showed that airborne emissions would not significantly contribute to any exceedence of the National Ambient Air Quality Standards ("NAAQS") for any criteria pollutants. Mr. Smith indicated that Old Dominion has applied for air permits as a minor source of all criteria pollutants. Each turbine will be equipped with continuous emissions monitors to ensure compliance with the Clean Air Act's permit requirements. (Ex. 4, at 2-4).

Mr. Smith testified the Facility would have no significant impact on surface or groundwater in neighboring areas. Groundwater will be used only for potable water for the three to five employees operating the Facility, and their usage should be less than that of the average household. Old Dominion will use sewage effluent from a wastewater treatment plant as process water for the Facility. Mr. Smith believes the recycling of wastewater eliminates the need to use more valuable surface or groundwater. Wastewater from the Facility will be sent back to the wastewater treatment plant and stormwater runoff will be diverted to a stormwater retention pond. Mr. Smith indicated that the pipeline route from the wastewater treatment plant has not yet been determined. (Ex. 4, at 4-6).

Mr. Smith stated Old Dominion held public meetings regarding the Facility on January 9 and 10, 2001. As part of the process to receive financing through RUS, Old Dominion will hold a meeting to inform the public of the Facility in 2002. At this meeting, public comments will be received, and RUS representatives will participate. Mr. Smith noted that Old Dominion is making regular efforts to educate the public on the layout of the Facility, provide operation information, and receive comments from the public regarding the Facility, as well as the routing of pipelines. Additionally, DEQ will conduct a hearing to consider the air permit for the Facility. (Ex. 4, at 7-8).

Mr. Smith indicated that a Spill Prevention Control and Countermeasure Plan will be developed to prevent the release of oil into the environment from the two fuel oil storage tanks. These tanks will be designed and constructed to meet Virginia Above Ground Storage Tank Regulations. The tanks will include an impervious secondary containment and a leak detection system. Old Dominion has sent out bids to engineering companies to design and determine the best routes for the water pipeline. The access road and the natural gas routes has not been finalized as of the date of the hearing. Mr. Smith testified that in siting the Facility and in choosing routes, Old Dominion will, when possible, avoid impacts to wetlands and cultural resources. If these resources are impacted, Old Dominion will obtain the appropriate permits, licenses, and approvals from federal, state, and local governments, as well as work to mitigate the impacts on these areas. (Ex. 4, at 6-10; Tr. at 134).

Mr. Smith testified that the majority of the Facility will be screened due to the Facility's placement on the site; it will be surrounded by existing vegetation. He noted that the Special Exception requires Old Dominion to protect existing vegetation not impacted by construction and to plant a 100-foot wide vegetative buffer in areas that would allow views of the Facility based on voids in existing vegetation. He noted that the 90-foot stacks of the Facility will be visible from several residences in close proximity to the Facility. Mr. Smith stated that outdoor lighting for security and personnel safety purposes will be designed to minimize impacts to surrounding areas and will be in accordance with the Fauquier County Zoning Ordinance and Special Exception. (Ex. 4, at 9-10).

Mr. Smith testified on the Facility's environmental impacts. He believes the Commission has no reason to be concerned about the Facility's emissions on water quality. The air modeling using DEQ methods indicated that there would be no violation of NAAQS, and no significant impact to air quality. Mr. Smith stated that Old Dominion will control emissions during construction in accordance with federal and state regulations. Old Dominion has been working with the Department of Game and Inland Fisheries ("DGIF") on ways to enhance wildlife habitat at the site. He said that erosion and sediment control plans approved by the County, which comply with the Department of Conservation and Recreation Division of Soil and Water Conservation regulations, will be implemented at the Facility, and that measures will be taken to protect trees not removed during construction. (Ex. 4, at 14-17; Tr. at 134).

In his supplemental prefiled direct testimony, Mr. Smith indicated that the Facility's entrance route has not yet been finalized. He reiterated that Old Dominion will obtain all applicable construction permits prior to construction. He also indicated that Old Dominion would comply with all of the 24 conditions imposed by the Special Exception from the County, and he attached a copy of these conditions with his supplemental testimony. He explained that DEQ performed ground-level ozone modeling for 16 proposed power stations in Virginia, and that the results of the modeling for ground-level ozone are well below the ten parts per billion level that is considered significant for the model. (Ex. 5, at 1-4).

Mr. Smith's prefiled rebuttal testimony addressed issues raised in written comments to the Commission, Staff testimony, and conditions recommended by the DEQ. He stated that Old Dominion must obtain an erosion and sediment control permit and a Virginia Pollutant Discharge Elimination System ("VPDES") Stormwater Management General Permit prior to construction of the Facility. Old Dominion will work closely with state and County officials to ensure that all erosion, sediment control, and stormwater requirements are met. If wetlands will be impacted, an application for an Army Corps of Engineers' permit and a Virginia Water Protection permit will be submitted to the Virginia Marine Resources Commission, and those permits will be obtained prior to impact on wetlands. He said that the construction and operation of the Facility is not expected to impact any threatened or endangered species. Mr. Smith noted that DGIF identified two species of concern, but studies revealed they should not be impacted. According to Mr. Smith, DGIF will conduct another site visit to verify results. Old Dominion will continue to work with DGIF and the U.S. Fish and Wildlife Service to make appropriate arrangements with regard to the protection of any threatened or endangered species encountered at the site. (Ex. 10, at 2-3; Tr. at 159-160).

Mr. Smith explained that for potable water a well construction permit is required, and that a condition of the County's Special Exception requires County Health Department approval prior to installation of the well. Treatment facilities for stormwater will be designed in accordance with federal, state, and local regulations. Mr. Smith stated that once the access road and pipeline routes have been established, the Virginia Marine Resources Commission, and federal, state, and local agencies will be contacted for permits and approvals as necessary. During construction, Old Dominion will follow federal, state, and local regulations in controlling air emissions and soil erosion; solid and hazardous waste will be disposed of in accordance with federal, state, and local regulations. (Ex. 10, at 5-8; Tr. at 159-160).

Mr. Smith noted that any pesticides will be used in accordance with the manufacturers' recommendations. A comprehensive plan will be used to limit any disturbance to the surrounding forest during construction, and a site plan with traffic analysis will be developed in coordination with the Virginia Department of Transportation and the County prior to construction. As indicated in his prior testimony, Mr. Smith reiterated that if the construction of pipelines or access roads cannot avoid a cultural resource site, or if during construction, cultural resources are found, Old Dominion will work with state agencies and the County on studying, recording, and mitigating these impacts. (Ex. 10, at 9-10; Tr. at 160).

Mr. Smith testified that emissions from the Facility and other proposed facilities would not cause harmful acidification and nitrogen deposition in the Shenandoah National Park, the Chesapeake Bay, or impair waterways in the region. He noted that Old Dominion voluntarily commissioned a study concerning the cumulative impact on the Remington area air quality from the combined emissions of Virginia Power's existing plant and the proposed Facility. Employing the same modeling methodology used for the air permit application, the study showed that the combined emissions for criteria pollutants would have no significant impact on the Town of Remington, or its surrounding area. The combined emissions are significantly below modeling significance levels and the NAAQS. Mr. Smith indicated that when a source is modeled below the modeling significance level, the source is deemed by DEQ to require no further modeling. (Ex. 10, at 10-11; Tr. at 162-164).

At the hearing, Mr. Smith testified that Old Dominion is seeking funding from RUS and must comply with its requirements. Thus, Old Dominion is required to consider the impacts the Facility will have on air, water, threatened and endangered species, cultural resources, wetlands, land use, water resources, socio-economics, geology and soils, vegetation and wildlife, noise, and aesthetics. Mr. Smith discussed ODEC's experience with its Clover facility in setting up recreational and wildlife areas using the property surrounding the generation facility. He also explained that Old Dominion has agreed to place the remaining acreage not used for electric generation at the site under a conservation easement restricting development. Additionally, Old Dominion will provide \$1.5 million to the County to fund the acquisition of purchased development rights to protect agricultural land or open spaces. (Tr. at 132-135).

Mr. Smith stated Old Dominion's air permit application indicates an annual operation of 1200 hours on natural gas and 130 hours on fuel oil. Old Dominion plans to use low-sulfur fuel oil (0.05%) and believes that with operation at or below 130 hours of use, there will be no significant impact on the environment. However, he indicated Old Dominion is always sensitive to the

environment whenever possible, and if ultra-low sulfur fuel oil (0.015%) were to be commercially available and reasonably priced so that Old Dominion would not be competitively disadvantaged by using it, it would do so. (Tr. at 162, 168).

On cross-examination, Mr. Smith explained that Burns & McDonnell performed two air dispersion models, one for Old Dominion's air permit application and one to determine the combined impact of the existing Virginia Power plant and the proposed Facility. He explained that the NAAQS consist of primary standards set to protect human health including the health of sensitive populations, such as asthmatics, children and the elderly, as well as secondary standards set to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. He clarified that a specific level was established for each of six criteria pollutants. If modeling data reveal levels below the significance level for each pollutant, the EPA and DEQ require no further analysis. Mr. Smith noted that the Facility was below the significance levels for all pollutants. He indicated that Old Dominion applied for an air permit as a new source with the DEQ, and that the permit is in the drafting stage. He also indicated that Old Dominion voluntarily restricted its emissions to less than 250 tons of any criteria pollutant, consequently, it qualifies as a minor source. (Tr. at 136-140).

Mr. Smith clarified that Old Dominion will be required to have two VPDES permits, one for construction, and one for operation of the Facility. As for wastewater, Mr. Smith indicated that, although it is uncertain if a permit will be required, Old Dominion will work with DEQ, the County Health Department, and the County Water Control Board to obtain any necessary permits or approvals. He stated Old Dominion would work with DEQ to investigate whether a water withdrawal permit will be necessary. Mr. Smith testified that Old Dominion would use muted colors for the 90-foot stacks to aid in reducing their visual impact. When questioned, Mr. Smith answered that Old Dominion has not yet determined gas or water pipeline routes, but would utilize existing rights-of-ways and configure the routes in a manner to mitigate impacts on the property of the residents in the area. (Tr. at 141-145, 149-154).

In his prefiled rebuttal testimony, Paul F. Greywall of Trinity Consultants, Inc., of North Carolina ("Trinity") addressed the current levels of air quality and any cumulative impacts the proposed Facility, and other existing or proposed facilities may have on air quality in the County and surrounding areas. Mr. Greywall has been working on air quality projects for the past eight years. He has managed or conducted Prevention of Significant Deterioration ("PSD") air dispersion modeling analyses for over twenty different facilities in a wide variety of industries. Mr. Greywall has participated in several meetings with DEQ and the Commission, to discuss procedures for conducting cumulative air quality impact analyses for proposed power plants. (Ex. 12, at 2-3).

Mr. Greywall testified that the current air quality of the County and the surrounding counties is in attainment for all NAAQS. Based on additional modeling developed in coordination with the Commission Staff and the DEQ, Mr. Greywall concluded that the cumulative impact of the Facility and 22 other proposed electric generating facilities would not jeopardize air quality in the County or surrounding counties. The combined impacts from all 23 proposed electric generating facilities are well within the allowed PSD increment levels and, when added to the worst-case background air quality, the combined impacts will not cause or contribute to a violation of the NAAQS. (Ex. 12, at 2-3).

In addition, Mr. Greywall concluded that the Facility, and the other proposed power plants will not cause or contribute to an adverse impact on the Air Quality Related Values in the Shenandoah National Park. He explained that cumulative impact modeling demonstrates there is very little combined effect from the 23 proposed plants considered. The modeling shows that the maximum pollutant concentrations at any point in the area are due to a single facility. Since each of the 23 proposed generating facilities with the potential to impact the Shenandoah National Park must demonstrate that any potential impacts are within acceptable levels for DEQ to issue an air permit, Mr. Greywall testified it is reasonable to infer that the combined impacts from all permitted facilities will also be acceptable. (Ex. 12, at 6).

Mr. Greywall explained that DEQ collects data from an extensive network of air quality monitoring stations it maintains throughout Virginia. The data sets collected characterize existing air quality for comparison to the NAAQS. Mr. Greywall testified the data from the representative monitors support the conclusion that the ambient air quality in the County is good. He also indicated that sufficient monitoring stations exist to adequately characterize the existing air quality in the Fauquier County area with regard to ozone, nitrogen dioxide ("NO<sub>2</sub>"), sulfur dioxide ("SO<sub>2</sub>"), carbon monoxide ("CO"), and particulate matter ("PM"). The monitoring at these stations has recorded no violations of any NAAQS over the last five years, and the area is considered in attainment for all NAAQS. (Ex. 12, at 4-5).

Mr. Greywall noted that the methodology Trinity used to complete the cumulative impact analysis was discussed among Trinity, the Staff, and DEQ. The modeling assessed the potential air quality impacts from 23 proposed electric generation facilities. Trinity performed modeling for NO<sub>2</sub>, SO<sub>2</sub>, CO, and PM. DEQ and EPA performed ozone modeling predicting the impact of 16 of the 23 proposed facilities. Trinity analyzed the DEQ and EPA data, and extrapolated the combined impact data to 23 power plants. Mr. Greywall also analyzed the DEQ and EPA data to estimate the impact of the Virginia Nitrogen Oxides State Implementation Plan Call ("NO<sub>x</sub> SIP Call") on the County and surrounding counties. Trinity modeled emissions from every electric generation unit represented in the 23 air permit applications submitted at the maximum levels requested in the permit applications, or at the maximum levels authorized by the DEQ. The ozone modeling relied upon a baseline inventory of actual emissions from all sources of NO<sub>x</sub> and Volatile Organic Compounds ("VOCs") in the Commonwealth of Virginia. (Ex. 12, at 8-11).

Mr. Greywall testified that the modeling software Trinity used makes conservatively high predictions of combined ground-level concentrations. DEQ's ozone modeling was performed using a method similar to the model used by the EPA to predict the impact of the NO<sub>x</sub> SIP Call on ozone formation. To establish existing air qualities in the area, Commission Staff, DEQ, and Trinity agreed to use the highest readings from DEQ monitoring stations surrounding the County. This provided conservative estimates of air quality. Mr. Greywall testified that other conservative features were built into the analysis of cumulative impacts to ensure that it overstated rather than understated the predicted impacts. For example, DEQ locates monitors based on the level of concern it may have regarding air quality at the location. In addition, the models analyzed 23 recently permitted or proposed facilities, but it is unlikely that all of the proposed facilities will be built. He also indicated that actual emission rates from an electric generation facility are usually much less than the maximum potential rate used in the models. Furthermore, Mr. Greywall noted that the models do not account for the reduction of emissions that will result from the Acid Rain

Prevention Program, the Regional Haze Program, and other regulatory programs that are being implemented at the federal and state level. Mr. Greywall explained that, although no approved regulatory protocol to predict cumulative impact exists, the Staff, DEQ, and Trinity agreed that the approach applied here is reasonable. (Ex. 12, at 11-19).

At the hearing, Mr. Greywall indicated that the cumulative impact analysis performed by Trinity was reviewed by DEQ, which in turn provided comments to the Commission. Mr. Greywall read the comments into evidence. He then explained that the cumulative impact analysis performed by Trinity contains basically three separate air quality assessments. The first assessment is the impact on air quality from the individual source, the proposed Facility, referred to as the Individual Impact. The second portion of the assessment involves the combined impacts of all 23 proposed plants including the Facility, referred to as the Combined Impact. The final analysis involves quantifying the existing air quality, and then examining the combined effects from the 23 proposed facilities in combination with the existing air quality. This is referred to as the Cumulative Impact. (Tr. at 179).

Mr. Greywall then discussed the results. For NO<sub>2</sub>, the maximum predicted impact from the individual sources was .012 micrograms per cubic meter. The single source significance level for NO<sub>2</sub> is 1.0 microgram per cubic meter. He explained that the EPA and DEQ establish the single source modeling significance level. In this case, the result is a small fraction of the modeling significance level. Thus, for the EPA and DEQ, that is the end of the analysis. Then the combined value for all 23 facilities was examined. That value was .43 micrograms per cubic meter. Although there is no standard against which to compare this value, Mr. Greywall explained that DEQ agreed that a reasonable comparison would be the PSD increment, which is the increment by which a facility is allowed to degrade existing air quality without causing significant harm to the environment. In the present analysis, the PSD increment is 25 micrograms per cubic meter. Mr. Greywall pointed out that .43 is a very small fraction of that value. Finally, the cumulative total was 29.43 micrograms per cubic meter, which was achieved by adding the combined impact to the existing air quality value. Mr. Greywall compared this value to the NAAQS, which is 100 micrograms per cubic meter. Thus, the cumulative total is about 30% of the NAAQS. He noted that with NO<sub>2</sub>, the background value of 29 micrograms per cubic meter is based on the worst observed impact occurring over the past five years, which conservatively overstates the number. (Tr. at 183-186).

Addressing the remainder of the criteria pollutants analyzed, Mr. Greywall explained that the single source impacts from the Facility are insignificant for all pollutants in all averaging periods analyzed. He explained that the Combined Impacts are less than the PSD increments for all averaging periods analyzed, and the Combined Impacts for all pollutants in all averaging periods,

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<sup>&</sup>lt;sup>5</sup>In part, DEQ comments were as follows: "The Trinity Consultants report provides much detailed information. The analysis includes the impact of some 23 proposed facilities on the health-based criteria pollutant standards in and around Fauquier County. The results showed that there would be only minimal increases in air quality levels of sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, and ozone. Predicted concentrations are well below the health-based standards, in most cases even less than 50% of the health-based standard. The approach taken by Trinity Consultants for ODEC's Marsh Run Facility is a reasonable one and one way to address the cumulative impact issue. It appears to answer the questions raised by the hearing examiner in other power plant applications. The package also includes the latest version of what DEQ did in estimating the impact of proposed facilities on ozone levels around the state." (Ex. 13).

with the exception of SO<sub>2</sub>, are less than the single source modeling significance levels. For SO<sub>2</sub>, although the combined impact is slightly greater than the modeling significance level for a single source, Mr. Greywall noted that it is very slightly higher and still well below the PSD increment. Additionally, the cumulative impacts are less than the NAAQS for all pollutants in all averaging periods. With the exception of ozone, all cumulative impacts are less than 50% of the NAAQS. (Tr. at 186-188).

Mr. Greywall then addressed the analysis of the ozone values. He indicated that there is no accepted method for analyzing the impacts of a single source for ozone formation. He explained that there are a number of variables that affect the formation of ozone, including regional emission of NO<sub>x</sub> and VOCs, which are referred to as ozone precursors, as well as specific meteorological conditions. Analysis of the DEQ modeling for ozone determined that for the one-hour ozone standard, the Combined Impact of the 23 proposed facilities was three parts per billion, in comparison to the NAAQS of 125 parts per billion. <sup>6</sup> To put this value in perspective, Mr. Greywall noted that EPA and DEQ indicated that the value is less than the level of inaccuracy in the models. Mr. Greywall stated that the combined values, added to the values for the NO<sub>x</sub> SIP Call and the background concentration of 120 parts per billion, yield a conservatively high value of 109 parts per billion, which compares favorably to the NAAQS value of 125 parts per billion. According to Mr. Greywall, the range predicted for the impact of the NO<sub>x</sub> SIP Call is 14 to 18 parts per billion and in this analysis, the more conservative value was used. Furthermore, the NO<sub>x</sub> SIP Call puts a cumulative cap on emissions. Therefore, the Combined Impact of three parts per billion would be part of that capped value and should not be added against the NO<sub>x</sub> SIP Call value. Therefore, by Mr. Greywall's analysis, the Cumulative Impact value would more likely be 106 parts per billion. (Tr. at 189-194, 199-200).

Mr. Greywall also explained that ozone formation is not a locality-specific problem, but rather a regional issue. He indicated the analysis was done using the one-hour ozone standard that is still in effect; however, he also indicated that the new eight-hour ozone standard is also deemed to be in effect. According to Mr. Greywall, the eight-hour standard is law; however, the EPA has yet to develop regulations to implement and enforce the law. He noted that the EPA still must determine the existing air quality in relation to the eight-hour standard, determine which regulations are in effect now (for example the NO<sub>x</sub> SIP Call), and determine what impacts these regulations will have on reducing ground-level ozone. This is a long process, and it will probably be 2006 or 2007 before it is fully implemented. Still, Mr. Greywall testified that the impact of the 23 proposed plants under the new eight-hour standard would be similar to the impact under the existing one-hour standard. He also indicated that for the most recent three years, the data from monitors in Fauquier County show that under the eight-hour standard the area is in attainment. He added that under both the one-hour and eight-hour standards the air quality will be benefited by the NO<sub>x</sub> SIP Call. Mr. Greywall believes it can reasonably be concluded that the proposed Facility will not cause or contribute to a violation of the new eight-hour ozone standard. (Tr. at 194-199).

Addressing the new standard for particulate matter, Mr. Greywall indicated that, as with ozone, many factors influence the formation of particulate matter. The DEQ is presently assessing existing air quality in Virginia using the new  $PM_{2.5}$  standard. However, there is at present no satisfactory quantitative assessment available to measure the impacts of the proposed Facility and

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<sup>&</sup>lt;sup>6</sup>DEQ's analysis of 16 of the 23 proposed facilities yielded a value of two parts per billion for ozone. (Tr. at 190).

the other facilities on  $PM_{2.5}$ . DEQ has not yet requested that facilities submit data at the  $PM_{2.5}$  level. Mr. Greywall did indicate that displacing coal-based plants with newer, cleaner burning plants will definitely reduce the level of  $PM_{2.5}$  in the air. However, the data are not sufficient to determine the impact of the 23 facilities on  $PM_{2.5}$  standards. (Tr. at 201-204).

On cross-examination, Mr. Greywall attempted to put the ozone data into perspective. A facility might produce 250 tons of NO<sub>x</sub> emission in a year, but the NO<sub>x</sub> SIP Call still will reduce NO<sub>x</sub> emission by 100,000 tons per year. He also elaborated on the fact that ozone is a regional problem. Thus, EPA will allow a percentage of NO<sub>x</sub> credit trading to be interstate because reduction efforts are focused on regional reductions. In the present case, the trading of credits must be one-to-one and benefit the County. However, an interstate trade under the NO<sub>x</sub> SIP Call would help the ozone level in the County. Mr. Greywall also explained that there is a lot of background ozone and that, no matter what efforts are undertaken, the ozone level will never be zero. Mr. Greywall made clear that it would be difficult to assess the impact of a particular plant on ozone levels because of ozone's regional nature. He indicated that a very rough guess might be achieved by dividing the three parts per billion by 23, to get a .15 parts per billion value; however, he cautioned that this would not be an accurate figure for analysis. (Tr. at 208-214).

Mr. Greywall addressed the impact of dispersion on the analysis and evaluation of cumulative impacts on a particular locality. He explained that, as one moves away from a facility, the concentration of criteria pollutants drastically decreases. The modeling done by Trinity was performed to show the effects of the convergence of pollutants from different facilities. The highest concentrations are at the facilities themselves. By the time pollutants converge at any other points, the concentration is much less than it would be at any single facility. He also indicated that if the plumes from all of the 23 proposed facilities converged at one location, there still would be no exceedence of the NAAQS. (Tr. at 215-216).

Mr. Greywall then explained that the  $NO_x$  SIP Call is a cap and trade program implemented to reduce ozone concentration at the regional level. It places a cap on the total amount of  $NO_x$  emissions in a region and allows producers to trade credits. Economic incentives should encourage producers to retrofit facilities with cleaner technology and replace other dirtier facilities. (Tr. at 219-223).

Finally, Mr. Greywall discussed the operation of the PSD increment, which is the allowable amount of degradation permitted in a particular area. If the sum of the PSD value and the existing air quality is below the NAAQS, then one can be assured the area will remain below the NAAQS. Mr. Greywall explained there are regulations in place to ensure that the area air quality will be degraded no more than the PSD increment. (Tr. at 224-226).

## Testimony and Evidence of Staff

The Staff presented the prefiled direct testimony of three witnesses: Mr. Marc A. Tufaro, assistant utilities analyst with the Commission's Division of Energy Regulations; Ms. Mary E. Owens, principal financial analyst with the Commission's Division of Economics and Finance; and Mr. Jarilaos Stavrou, principal research analyst with the Commission's Division of Economics and Finance.

Mr. Tufaro's testimony addressed the proposed Facility's impact on rates, reliability of regulated service, and technical viability. He also presented Old Dominion's justification for the Facility and DEQ's review of the potential environmental impacts of the Facility. Mr. Tufaro described the criteria he used to evaluate Old Dominion's Application. He believes the requirements of § 56-580 D supplanted § 56-265.2 B of the Code of Virginia and apply in this case. However, since Old Dominion provided sufficient information, he considered the criteria of § 56-265.2 B in his evaluation of the Application. Additionally, Mr. Tufaro believes it is unclear whether a finding of need is required pursuant to § 56-234.3, but he presented information pertaining to need to ensure the Commission has a complete record. (Ex. 7, at 2-3).

Mr. Tufaro reported that ODEC is a utility aggregation cooperative formed under the laws of the Commonwealth. It currently supplies the electric power needs of its 12 distribution cooperative members ("Member Cooperatives") under wholesale power contracts that extend through December 20, 2028, and continue thereafter until terminated with at least three years' notice. The Member Cooperatives serve approximately 423,000 customers in Virginia, Maryland, Delaware, and West Virginia. ODEC's service territory is divided into the Delmarva Peninsula and the Virginia Mainland. The majority of the Member Cooperatives' load is residential. Approximately 79% of ODEC's energy sales are in the Virginia Mainland. Mr. Tufaro provided a general description of the proposed Facility. He indicated a 230 kV switchyard will interconnect the generator to the 230 kV lines on the site owned by Virginia Power. The estimated cost of construction is \$288.6 million, which equates to \$415 per kilowatt based on the lower summer rating. The site is approximately one-half mile from Virginia Power's Remington Station. A Transco natural gas pipeline and a Virginia Power 230 kV transmission line are at, or near the site. Old Dominion initially optioned the land for the proposed Facility on January 12, 1999. After the necessary studies were performed, Old Dominion completed its acquisition of the property on October 19, 2000. (Ex. 7, at 3-5).

Addressing the need for the Facility, Mr. Tufaro stated that ODEC historically has been a net purchaser of capacity and energy to meet its Member Cooperatives' requirements. ODEC owns generating resources, which produce approximately 45% of its current capacity requirements and 72% of the energy requirements in the Virginia Mainland. It purchases the remainder of its Virginia Mainland requirements from several suppliers. Mr. Tufaro noted that ODEC's existing power purchase contracts will terminate on a staggered basis over the next few years. He noted that Old Dominion states in its Application that a majority of the capacity requirement stems from the expiration of existing contracts, indicating a greater need in fact than requirements based solely on load growth. Mr. Tufaro also noted that ODEC's internal analysis of the market suggested that ownership of single-cycle turbines would be the best course of action to pursue. Its evaluation of the costs and risks, through the RFP process, demonstrated that the self-build option provided better economics and a hedge against price volatility. He reported that ODEC stated its need for the Facility to be in operation by June 1, 2004, necessitating the commencement of construction no later than March 1, 2003. (Ex. 7, at 5-7).

Mr. Tufaro addressed the impact of the Facility on rates paid by retail customers of ODEC's Member Cooperatives. The Virginia Electric Utility Restructuring Act caps non-fuel related rates for retail customers for a period beginning January 1, 2001, and possibly extending until July 1, 2007. Consequently, the proposed project is unlikely to impact base rates paid by the Member Cooperatives' retail customers during that period. The Facility may impact ODEC's fuel costs and

the wholesale power cost adjustments ("WPCA") factor paid by customers who purchase electricity from Member Cooperatives. Additionally, customers who shop for competitive electricity may be impacted by wire charges. In either case, the Facility should have a smaller impact on the WPCAs of the Member Cooperatives than any of the other proposals considered by ODEC. Mr. Tufaro indicated it is unclear how the Facility will impact Member Cooperatives' rates for default services after the expiration of capped rates. (Ex. 7, at 7-8).

Mr. Tufaro also addressed the Facility's impact on Virginia Power's rates and reliability. ODEC has executed an Interconnection Agreement with Virginia Power for the Facility. The cost of the interconnection facilities is \$13,021,000, of which \$4,953,000 will be assigned to ODEC via a Monthly Assignment Facilities Charge. The balance of the upgrades will be incorporated into the average system rate of Virginia Power, of which ODEC pays a load ratio share. In Mr. Tufaro's view, since Old Dominion will be responsible for the upfront and on-going costs associated with the interconnection, the addition of the Facility should have negligible, if any, impact on Virginia Power's retail rates. (Ex. 7, at 8-9).

Mr. Tufaro discussed the environmental requirements related to the Facility. Old Dominion received a rezoning approval in the form of a Special Exception from the County; the Special Exception contained 24 conditions. Additionally, the DEQ-coordinated reviews produced a number of recommendations that DEQ suggested the Commission consider as conditions to the CPCN. The recommendations are as follows:

- Obtain all applicable environmental permits or approvals or exceptions prior to commencement of construction activities;
- Comply with all the conditions of permits and approvals listed in the "Regulatory and Coordination Needs" section of Comments and Recommendations:
- Coordinate with the Department of Game and Inland Fisheries and the U.S. Fish and Wildlife Service in regard to protecting the dwarf wedgemussel and the upland sandpiper;
- Consult with the Department of Historic Resources to complete the review and mitigation of any impacts to historic structures or archaeological resources;
- Protect individual trees and blocks of forest through the practices and precautions suggested in "Environmental Impacts and Mitigation;"
- Notify the Remington sewage treatment plant of the possibility that a pretreatment program may be required if wastewater from the project is discharged back to it;
- Follow the principles and practices of pollution prevention to the maximum extent practicable, as listed in "Environmental Impacts and Mitigation;"
- Reduce solid waste at the source, re-use it, and recycle it to the maximum extent practicable;
- Limit the use of pesticides and herbicides as recommended in "Environmental Impacts and Mitigation;"
- Follow the precautions recommended by the Department of Game and Inland Fisheries for any in-stream work;

- Conduct a habitat assessment to determine nesting habitat suitability for the upland sandpiper, a bird species, at the project site; and
- Work with the Department of Game and Inland Fisheries in regard to managing the remainder of the project property for wildlife benefit and recreation opportunities.

Ex. 7, at 10-11.

Mr. Tufaro pointed out that many of the issues raised in the DEQ report will be addressed by the requirement that Old Dominion comply with federal, state, and local environmental laws and regulations. (Ex. 7, at 17).

According to Mr. Tufaro, ODEC is capable of developing the Facility. For financing purposes, the Facility will be owned and operated by Marsh Run. ODEC and Marsh Run will enter into a take-or-pay contract for the entire output of the Facility. Mr. Tufaro noted that ODEC will manage construction and has previous experience as a construction agent on the Clover Power Station in Virginia and the Rock Springs Station in Maryland. He further noted that Old Dominion proposes to issue an engineering, procurement, and construction contract to an experienced firm. (Ex. 7, at 12).

Mr. Tufaro noted the Facility will be fueled with natural gas delivered by Transco. In the event natural gas is not available, the Facility will use fuel oil stored in two one-million gallon tanks. Mr. Tufaro stated he believes it is extremely difficult to forecast the impact of this Facility and other proposed facilities on the availability of service or rates charged by gas utilities in Virginia. He also indicated that he believes while fuel supply arrangements, whether known or unknown in this or other power plant applications, may call into question the ability of the natural gas industry infrastructure to produce and deliver sufficient quantities of fuel to new and existing customers, the movement towards the competitive provision of electric generation supply requires market participants to develop projects that will service such facilities. Mr. Tufaro stated an assumption underlying the public policy initiative codified as the Virginia Electric Utility Restructuring Act is that adverse impacts will be more than offset by the benefits of moving electric generation supply to a competitive regime. (Ex. 7, at 12-15).

Finally, Mr. Tufaro testified that Old Dominion has a well-developed plan and the technical and economic capability to complete the Facility. He also concluded the Facility generally meets the criteria delineated in §§ 54-46.1, 56-234.3, and 56-265.2 of the Code of Virginia, and is consistent with the overall public interest. He recommended the Commission approve the proposed Facility. (Ex. 7, at 16-17).

Ms. Owens' testimony addressed Old Dominion's financial ability to construct the proposed Facility. The financial reports of ODEC indicate it is financially sound. ODEC's financial condition changed during 2001 due to: expenditures related to three facilities it is planning to construct; an increase in long-term debt from the issuance of \$215.0 million in Series A bonds to be used primarily for constructing the planned facilities; and retiring higher cost debt. Ms. Owens indicated she believes ODEC's operative cash flow is sufficient to meet its capital expenditures. She noted that ODEC has also established short-term lines of credit totaling \$210.0 million to

provide additional sources of financing. Of that total, \$115 million is available, subject to indenture limitations, for capital expenditures related to the development and construction of the three planned facilities. She found that ODEC's credit ratings by the three largest agencies are good and generally reflect the rating agencies' view that ODEC has a strong and growing service area, a record of strong financial performance, and a large residential base of customers. (Ex. 8, at 2-4).

Ms. Owens stated ODEC established a not-for-profit cooperative, Marsh Run Generation, LLC, with itself as the sole member to facilitate the construction and operation of the Facility. She stated this structure was used so that the planned RUS loan for the Facility will not affect the other assets and indentures of ODEC. The cost of the Facility is projected to be \$288.6 million, and ODEC has filed an application with RUS on behalf of Marsh Run, for long-term funds. She noted that ODEC would lend a portion of the proceeds from its bonds to fund construction. If RUS funds are unavailable and the proceeds from the bond issuance are exhausted, ODEC plans to use its \$115 million line of credit, and it may also issue bonds as necessary. (Ex. 8, at 4-5).

In Ms. Owens' view, Old Dominion has access to the financial resources necessary to contract, construct, and operate the Facility. She recommended a sunset provision be included, allowing Old Dominion two years from the date of the CPCN to begin construction. (Ex. 8, at 5).

Mr. Stavrou described ODEC's load forecast and resource plan, evaluated the reasonableness of the results, addressed the economic impacts expected from construction of the Facility, and evaluated whether the Facility is in the public interest. He indicated the Facility will be used to support ODEC's Member Cooperatives in the Mainland Virginia area after the existing contracts with Virginia Power expire over the 2002 through 2004 time period. ODEC's forecast of capacity and energy needs is based on the 2000 Power Requirements study for the period 2000-2014. Mr. Stavrou noted that ODEC forecasted energy sales would increase by 3.3%, reflecting an increase of winter coincident peak demand by 3.5% and an increase of summer coincident peak demand by 2.8%. Commission Staff examined the assumptions used to prepare the overall forecast. Mr. Stavrou stated ODEC's forecast of energy sales and load growth is consistent with forecasts made in recent years by other Virginia public utility companies. (Ex. 9, at 2-4).

Mr. Stavrou indicated that Old Dominion did not prepare an economic study to evaluate all direct and indirect economic impacts of the Facility on the regional economy. However, he noted that significant benefits are evident from the direct impacts alone. The cost of the Facility is estimated to be about \$270 million. Old Dominion expects to pay about \$2.2 million in property taxes per year. Estimated payroll expenditures during construction are about \$24 million, and another \$1.25 million in other local purchases is projected, for a combined total of \$25.25 million in direct costs during the construction period. Additionally, Old Dominion has made a \$1.5 million commitment to the County's purchase development rights program. After completion, the Facility will create between three and five jobs with an estimated annual payroll of about \$400,000. Mr. Stavrou stated his belief that a 2.5 multiplier of the direct costs is a reasonable way to evaluate the indirect economic impacts. Applying the 2.5 multiplier to the \$25.25 million in direct costs yields an estimated indirect economic impact of \$63 million for the Facility. (Ex. 9, at 4-5).

Mr. Stavrou noted the Board of Supervisors supported the Facility and the Town of Remington has neither supported, nor opposed it officially. Mr. Stavrou believes that, generally

speaking, adding capacity not controlled by Virginia Power is desirable to further economic competition. However, he noted that Virginia Power is the North American Electric Reliability Council control area coordinator for the Facility and, as such, may ultimately maintain dispatch rights to operate the Facility. Therefore, he believes it is unclear whether the Facility will have any practical effect on the market power of Virginia Power. Mr. Stavrou found the Facility's ability to supply ODEC's native load will have a positive effect in protecting ODEC against wholesale market volatility and market power in that ODEC will not have to purchase electricity from the wholesale electricity market when prices exceed generating costs. Mr. Stavrou concluded that the Facility appears to be reasonable and in the public interest; he does not oppose Old Dominion's request for a CPCN. (Ex. 9, at 5-7).

## **DISCUSSION**

The Commission uses six general criteria to evaluate applications to construct electric generating facilities.<sup>7</sup> The six criteria are: (1) reliability;<sup>8</sup> (2) competition;<sup>9</sup> (3) rates;<sup>10</sup> (4) environment;<sup>11</sup> (5) economic development;<sup>12</sup> and (6) public interest.<sup>13</sup> These six criteria will be applied to the evidentiary record herein.

Moreover, since this case was heard, the General Assembly amended Va. Code Ann. § 56-580 D. <sup>14</sup> The amendment, however, only appears to apply to the evaluation of the

<sup>7</sup>See, e.g., Application of Tenaska Virginia Partners, L.P., Case No. PUE-2001-00039, Final Order (April 19, 2002).

In order to avoid duplication of governmental activities, any valid permit or approval required for an electric generating plant and associated facilities issued or granted by a federal, state or local governmental entity charged by law with responsibility for issuing permits or approvals regulating environmental impact and mitigation of adverse environmental impact or for other specific public interest issues such as building codes, transportation plans, and public safety, whether such permit or approval is prior to or after the Commission's decision, shall be deemed to satisfy the requirements of this section with respect to all matters that (i) are governed by the permit or approval or (ii) are within the authority, and were considered by, the governmental entity in issuing such permit or approval, and the Commission shall impose no additional conditions with respect to such matters. Nothing in this section shall affect the ability of the Commission to keep the record of a case open. Nothing in this section shall affect any right to appeal such permits or approvals in accordance with applicable law. In the case of a proposed facility located in a region that was designated as of July 1, 2001, as serious nonattainment for the one-hour ozone standard as set forth in the federal Clean Air Act, the Commission shall not issue a decision approving such proposed facility that is conditioned upon issuance of any environmental permit or approval.

Ostensibly, the purpose of the amendment was to promote efficiency in government by eliminating duplicate review of electric generating facility applications by various state agencies. The practical effect is that the length of time to get a facility approved in Virginia may now have increased significantly. It appears that developers of electric generation facilities will have to obtain all of their key environmental permits by the time

<sup>&</sup>lt;sup>8</sup>Va. Code Ann. §§ 56-580 D(i) and 56-46.1 A.

<sup>&</sup>lt;sup>9</sup>Va. Code Ann. § 56-596 A.

<sup>&</sup>lt;sup>10</sup>Va. Code Ann. § 56-580 D(ii).

<sup>&</sup>lt;sup>11</sup>Va. Code Ann. §§ 56-580 D and 56-46.1 A.

<sup>&</sup>lt;sup>12</sup>Va. Code Ann. §§ 56-46.1 and 56-596 A.

<sup>&</sup>lt;sup>13</sup>Va. Code Ann. § 56-580 D(ii).

<sup>&</sup>lt;sup>14</sup>The amendment to Va. Code Ann. § 56-580 D provides:

Facility's impact on cultural resources, which falls under the public interest standard and is addressed later in this Report.

## Issues Raised by Public Witnesses

PEC was the only public witness to testify in opposition to Old Dominion's application. The issues raised by PEC in its testimony included: the need for the Facility; the Facility's impact on local air quality; the Facility's effect on the public interest; and the Facility's compatibility with local land use.

### A. Need.

PEC questions whether Virginia needs the Facility's output when there appears to be excess electric generation capacity in the vicinity of the proposed plant. In support of its argument, PEC cites the fact that Virginia Power's peaking facility in Caroline County operated for only a few hours last year. PEC believes a reasonable power supply contract could be worked out between Virginia Power and ODEC.

In the past, the Commission could examine the issue of need and the type of generation that could best satisfy that need.<sup>15</sup> Under the statutory scheme now in place in Virginia, the issue of

the Commission conducts the hearing on their application. Otherwise, how will the Commission know what was or was not considered as part of the permitting process if an issue arises during the public hearing on the application? There have been a number of instances where citizens have raised concerns about facilities at the public hearing that may or may not have been considered as part of any permitting process by another state agency. Some examples are: (1) the minimum instream flow requirement for waterways in Virginia; some rivers and streams have them and some do not; (2) the cumulative impact of water withdrawals on rivers and streams; and (3) the choice of cooling technology for a facility; some facilities use "wet condenser" technology which uses approximately five to seven million gallons of water per day and some facilities use "dry condenser" technology which uses approximately 100,000 gallons of water per day. In the past, developers were able to proceed on parallel development tracks with other state agencies and the Commission. They may still be able to do that with their environmental and other permits, but it now appears all the tracks converge at the Commission.

It is unclear what the General Assembly intended with the last sentence in the statute. An electric generation facility may locate, and be permitted to operate, in a nonattainment area if it obtains sufficient emissions offsets. What difference does it make if the Commission is prohibited from conditioning its approval of the facility upon the receipt of a Prevention of Significant Deterioration ("PSD") air quality permit from DEQ? As soon as DEQ issues the permit, the Commission has no discretion under the statute, but to approve the facility. Either way, the facility will still be approved.

<sup>15</sup>The Commission formerly had the ability to determine whether the proposed facility was "necessary to enable the public utility to furnish reasonably adequate service and facilities at reasonable and just rates," and that the "public convenience and necessity" required the construction of the facilities. The Commission identified several factors that had to be demonstrated to satisfy this requirement: (1) the utility would have a need for the additional power within the time frame contemplated; (2) the cost estimates, choice of technology, construction plans and proposed manner of carrying out the project were reasonable; and (3) there were no other suitable alternatives to the proposed construction, such as conservation and load management, upgrading existing units, or obtaining the necessary power from resources other than the utility's own facilities. *See*, *Application of Old Dominion Electric Cooperative and Virginia Electric and Power Company*, Case No. PUE-1989-00051, 1989 S.C.C. Ann. Rep. at 309.

need may no longer be a factor in the Commission's analysis. The six criteria that the Commission may consider are set forth above and "need" is not one of the six.

A proposed facility is most likely to be impacted by the environmental, or the public interest standard. With regard to air quality in general, the cumulative air quality analysis prepared for this case, which used the absolute worst case modeling assumptions, indicates that if all 23 of the electric generating plants were built, their combined impact on the environment would be negligible. There may be individual instances where a facility is proposed for a site and because of site-specific environmental issues the application should be denied. Those site-specific concerns are not present in this case.

The public interest standard will be addressed later in this Report.

It is unlikely that additional electric generating facilities in Virginia will adversely impact reliability, competition, rates, or economic development. Additional facilities in Virginia should provide for greater reliability, as more facilities would be available for dispatch throughout Virginia. Generally, the more companies that are in a market the greater the competition for market share and the greater the likelihood that competitors will use price to gain market share. Price competition, if it ever develops in the retail electric market, should result in lower rates for consumers. Unlike regulated utilities, the risk associated with building a merchant electric generation facility that may be under-utilized is borne by the company's stockholders, not the electric utility ratepayers in Virginia. There is little risk to the average citizen if one of these merchant electric generating projects fails after it is constructed. It is unlikely that additional electric generating facilities will impact economic development, unless the air quality in the state deteriorates to the point that businesses would be dissuaded from locating in the state. The DEQ should preclude that from ever occurring under its PSD program, and the PSD increment established under that program.

The Commission is granted broad statutory powers, but those powers do not include the power to require Virginia Power and ODEC to enter into an electric supply contract, or the power to require the efficient use of electric generating resources in Virginia. In its comments, PEC continues to raise public policy issues, but it needs to remember that public policy is established by the General Assembly; the Commission merely implements that public policy.

## B. Local Air Quality.

The overwhelming evidence in this case is that the proposed Facility will have a minimal impact on the environment and local air quality. Old Dominion conducted two cumulative air impact studies. The first study analyzed the Facility's maximum potential emissions with the maximum potential emissions of the neighboring Virginia Power facility. This analysis indicated that the maximum combine emissions of the two facilities would not lead to an exceedance of any NAAQS. The second study analyzed the combined impact of the Facility's maximum potential emissions with the maximum potential emissions of 22 other proposed electric generating facilities. This analysis indicated that the Facility's air quality impact, when combined with the impact of the

22 other facilities, would not lead to an exceedance of any NAAQS.<sup>16</sup> If the exhaust plumes from all 23 proposed facilities converged at the same point in the landscape, there still would not be an exceedance of any NAAQS.

#### C. Public Interest.

The public interest standard has not been well articulated by either the General Assembly or the Commission. This standard would generally be impacted if the project developer chose the worst of all possible sites to propose locating its facility. This is not the case in this proceeding. The site chosen by Old Dominion does not impact any large residential subdivisions, population centers, recorded historical sites, or well-known scenic viewsheds.

PEC argues that it may be contrary to the public interest to have merchant electric generating facilities under-utilized or idled. The Virginia retail electric industry is in transition towards competition. In the competitive world, businesses fail every day for a variety of reasons: poor business plan; poor management; poor product quality; poor service; and sometimes just poor luck. In this competitive new world, it is not the Commission's responsibility to protect developers of electric generation facilities from the negative effects of competition. A competitive market can sometimes be a harsh reality. There is always someone just around the corner, or right up the street, who would like nothing better than to take all of your business. The risk that a merchant electric generation facility will be under-utilized or idled lies with investors in the project, not the electric ratepayers in Virginia. The mere fact that an electric generation facility is under-utilized or idled does not rise to the level of being contrary to the public interest. <sup>17</sup>

#### D. Land Use and Preservation.

Old Dominion has chosen a large acreage tract in a rural area to locate its proposed electric generation facility. In this case, the tract is approximately 280 acres. Old Dominion will use approximately 60 acres for the Facility. The remaining acreage will be placed under a conservation easement and permanently protected from development. The Special Exception issued by the County requires that the remaining acreage be used for wildlife habitat and wildlife observation areas. Old Dominion has agreed to work with DGIF, County environmental organizations, and the public schools in the development of the wildlife observation areas. The open land on the site can remain under cultivation for agricultural purposes. Old Dominion has agreed to plant 100-foot

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<sup>&</sup>lt;sup>16</sup>In each of the studies, the most conservative modeling assumptions were used. Each study used the Industrial Source Complex Model, which tends to overstate emissions. It was assumed that all of the facilities operated for 8,760 hours per year, although actual operations may be much less than that. Old Dominion intends to operate its facility 1,360 hours per year, 1,200 hours on natural gas and 160 hours on fuel oil. The other facilities in the cumulative study will likely be permitted for much less than 8,760 hours of emissions per year. Additionally, the worst meteorological conditions occurring over a five-year period were used in both studies.

<sup>&</sup>lt;sup>17</sup>There may be certain limited instances where a merchant electric generation facility that is idled for a period of time may be contrary to the public interest. This would generally occur if the owner fails to maintain the facility and the facility deteriorates to the point that it represents a hazard to the environment or the citizens living near the facility. Some local governing bodies have already included mitigation measures in the special use permits issued for certain facilities to address this very problem. The second may be if a merchant electric generation facility reduces output or is taken off line to affect the supply of electricity, and thereby the price of electricity. In a competitive world, absent a specific supply contract, there is no requirement that any of these merchant electric generating facilities produce a single kilowatt of electricity unless they believe the wholesale price is right.

buffers at various locations on the site to screen the Facility from its neighbors. Old Dominion has further agreed to fund a purchase development rights program with \$1.5 million dollars. The County will use the funds to purchase development rights in property located within a five-mile radius of the Facility to keep the area rural and agricultural.

PEC complains that the proposed site is sandwiched between two established agricultural and forestal districts, and the land use would be inconsistent with those zoning classifications, even though the site is not within either district. What PEC fails to recognize is that under Old Dominion's proposal, more land in the County would be permanently protected from development than would be temporarily protected if this application were denied. If this application were denied, a grand total of 60 acres would be temporarily protected from industrial development. Disapproval of the application does not mean that the entire 280-acre tract is permanently protected from other development. As Ms. DiSanza noted in her testimony, the tract could support residential development. Under Old Dominion's proposal, approximately 220 acres around the Facility would be permanently protected from development by a conservation easement. Additionally, the purchase development rights program Old Dominion is funding has the ability to permanently protect significantly more agricultural and forested land in the vicinity of the Facility. Since the land is not being purchased, only the development rights, more acreage can be protected under a conservation easement than could be protected if the land were purchased outright. If the application were denied, the County would lose the funding for this program.

Old Dominion should be commended, rather than criticized, for the approach it has taken in this case regarding land use. It has recognized that large industrial companies have to be good neighbors, as well as good stewards of the environment. The conservation easement and the landscape buffering requirements for the proposed site will ensure that its neighbors will not see or hear the Facility. The old adage "out of sight, out of mind" applies in this case. Additionally, the County's citizens will benefit from having public access to the wildlife observation areas that they had not been able to access in the past. As part of its plan for the remaining acreage, Old Dominion should consider a nature trail with interpretive signs placed along the route, particularly where the Native American sites are located on the property. By agreeing to fund the County's purchase development rights program, Old Dominion is ensuring that the County has the means necessary to maintain its rural and agricultural heritage.

## *Issues Raised by DEQ and Other Agencies*

A. Threatened and Endangered Species and other Fish and Wildlife.

DEQ's coordinated environmental review identified two threatened and endangered animal species that may occupy the proposed site, the dwarf wedgemussel and the upland sandpiper. There are no threatened and endangered plant species on the site.

The dwarf wedgemussel has historically been documented in Marsh Run. Old Dominion is planning no construction work in the creek. The Facility will be located approximately 800 feet from Marsh Run at its closest. During construction, Old Dominion intends to use erosion and sediment controls and best management practices to reduce sediment runoff into the creek. DGIF

supports Old Dominion's efforts in avoiding any instream work in Marsh Run. Old Dominion believes that its operations at the site will have no significant impact on the dwarf wedgemussel.

The upland sandpiper has been documented within two miles of the proposed site. Old Dominion's consulting biologist survey of the site revealed no upland sandpiper habitat. Old Dominion's biologist and DGIF's biologist met at the site to determine if any upland sandpiper habitat was present. In their collective opinion, the upland sandpiper does not use the site for nesting; however, DGIF intends to conduct another site survey during the upland sandpiper nesting season to conclusively determine if they are nesting on the site.

Old Dominion has committed to work closely with the U.S. Fish and Wildlife Service and DGIF to make appropriate arrangements for the protection of any threatened or endangered species encountered at the site. I find the Facility will have no material adverse effect on any threatened or endangered plant or animal species.

#### B. Cultural Resources.

There are no recorded architectural or archaeological resources on the project site. Old Dominion's consultant identified ten potential sites on the primary 252-acre tract. Five of the sites may be eligible for nomination to the National Register of Historic Places ("NRHP"). These sites include the existing farm complex, its out buildings, and a prehistoric Native American village. Old Dominion's consultant recommended that these sites be avoided. The other five sites do not appear to meet the eligibility criteria for nomination to the NRHP. The 60-acre footprint of the Facility avoids all ten sites.

Old Dominion's consultant also identified five potential sites on the 28-acre tract. <sup>18</sup> Two of the sites may have cultural significance. The first is a Native American village. The village is located on the eastside of the property along Marsh Run, and extends into the 252-acre tract. The consultant found numerous projectile points, grinding stones, ground stone tools, and pottery shards. A fire hearth feature was discovered near the middle of the site. The site is eligible for inclusion on the NRHP.

The second site consists of a series of 47 rock cairns. 19 The cairns could be Native American burial mounds, Revolutionary War or Civil War burial mounds, possible remains of makeshift chimneys for a Revolutionary War or Civil War camp, or simply fieldstone piles. Old Dominion's consultant stated that fieldstone piles normally exhibit some pattern such as outlining a field, however, in this case, the piles are random.

Old Dominion advised the Virginia Department of Historic Resources ("VDHR") that it plans to avoid all potentially eligible archaeological sites. Based on this representation, VDHR advised RUS that it concurred in a finding of no adverse effect on cultural resources based on avoidance. VDHR indicated that Old Dominion would be filing a plan of avoidance at a later date when it made a second filing with VDHR.

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<sup>&</sup>lt;sup>18</sup>This is the tract that Old Dominion purchased so that construction traffic could be routed through Virginia Power's property, which adjoins the site. <sup>19</sup>A "cairn" is a mound of stones erected as a memorial or marker. American Heritage College Dictionary 197 (1997).

In its prefiled testimony and its testimony at the hearing, Old Dominion was not as unequivocal with the Commission as it had been with VDHR. Old Dominion has not decided where it will place the access roads or the pipelines on the site. Old Dominion stated it would work with VDHR to avoid cultural sites, and if avoidance were not possible, it would mitigate any adverse impacts. If cultural sites are found during construction of the Facility, Old Dominion has agreed to stop work until an archaeologist, or a State Historic Preservation Officer, inspects the site and determines what action is appropriate.

Assuming the worst case scenario, that the 47 cairns are a Native American burial ground, on the record before me, I cannot determine Old Dominion's intentions for the 28-acre site. I just do not have the information I need to make a finding that the Facility will have no significant impact on cultural resources. It appears from DEQ's Coordinated Environmental Review that VDHR had not reviewed the findings from the historic resources survey of the second tract, the 28-acre parcel, when it sent its findings to DEQ. Accordingly, I recommend that the Commission require Old Dominion to file with the Commission a copy of the plan of avoidance that it filed with VDHR. If Old Dominion's final plans for its roads and pipelines avoid the two sites in question, and VDHR concurs with the plans, then, pursuant to § 56-580 D of the Code of Virginia, as amended, the issue is moot.

#### C. Wetlands.

The Facility is expected to have no impact on any wetlands. There is a farm pond and a spring located within the 60-acre project site, but these areas will not be impacted by construction. Depending on the routes, the gas or wastewater supply pipeline may impact some wetland areas. If these areas cannot be avoided, Old Dominion will apply to the Army Corps of Engineers and the Virginia Marine Resources Commission for the necessary permits. Old Dominion's response to any wetland areas that may be encountered in developing the Facility is reasonable. Accordingly, I find the Facility will have no material adverse effect on any wetlands.

### D. Erosion and Sediment Control.

Old Dominion must obtain an erosion and sediment control permit and a Virginia Pollutant Discharge Elimination System ("VPDES") Stormwater Management General Permit prior to construction of the Facility. Old Dominion has committed to work closely with state and County officials to ensure that all erosion, sediment control, and stormwater requirements are met. I find Old Dominion has reasonably addressed any erosion and sediment control issues that may be encountered in the development of the Facility.

## Issues Raised by Hearing Examiner

### A. Reliability.

The Facility can be interconnected to Virginia Power's transmission system without impacting reliability. The Facility will be connected to Virginia Power's 230 kV Morrisville to Remington line. The line will be cut and each end will terminate in the Facility's switchyard. The

switchyard will consist of a five breaker 230 kV ring bus with provisions to expand to six breakers in the future. Old Dominion and Virginia Power executed an Interconnection Agreement for the Facility on September 11, 2001. I find the Facility will have no material adverse effect on reliability.

## B. Competition.

According to Staff witness Stavrou, competition is furthered in Virginia when capacity is added that Virginia Power does not control. However, he noted that Virginia Power is the North American Electric Reliability Council control area coordinator for the Facility, and as such, it may ultimately maintain dispatch rights to operate the Facility. For this reason, Mr. Stavrou is unsure whether the Facility will have any practical effect on Virginia Power's market dominance. Given the uncertainty concerning who has the right to dispatch the Facility, it appears the Facility will neither promote, nor hinder retail electric competition in Virginia. Accordingly, I find the proposed Facility will have no material adverse effect on competition. With Virginia moving toward an independent system operator for the electric grid, the issue of who controls what electric generation facilities should be rendered moot.

#### C. Rates.

#### 1. Gas Rates.

Old Dominion believes the Facility should have no effect on the availability of natural gas for Virginia retail natural gas customers. Mr. Alexander testified that the Facility would be connected to the Transco interstate pipeline and only a small percentage of that pipeline's capacity serves Virginia customers. He outlined the positive benefits of adding the Facility's load to the pipeline, such as increasing the load factor on the pipeline and providing an impetus for system expansions and seasonal load balancing, which should result in lower natural gas rates, expanded capacity, and greater reliability.

The Staff believes it is extremely difficult to forecast the impact of the Facility and other proposed facilities on natural gas supplies. Mr. Tufaro testified, while there is some uncertainty regarding the ability of the natural gas industry to deliver sufficient quantities of natural gas to new and existing customers, the move towards competitive electric generation in Virginia will motivate natural gas suppliers to develop projects that will meet the service needs of such facilities.

At present, it appears Virginia has sufficient natural gas supplies that the Facility should have no impact on the supply or demand side of the retail natural gas price equation. Accordingly, I find the proposed Facility will have no material adverse effect on retail gas rates.

### 2. Water and Sewer Rates.

The Facility will obtain the water for its production equipment from a municipal wastewater treatment plant. The cost for all the piping, modifications, and incremental operating costs will be borne by Old Dominion. Potable water for the three or four employees that will work at the Facility

will be provided by an on-site well. Their water use should be less than that of a typical household. I find the proposed Facility will have no material adverse effect on retail water or sewer rates.

#### 3. Electric Rates.

Mr. Alexander testified the electric rates for ODEC's Member Cooperatives would be substantially benefited by the proposed Facility, and the rates of other Virginia electric customers would not be adversely impacted. The primary reason ODEC proceeded with the self-build option for a peaking power plant was the cost of securing peak demand power. ODEC issued an RFP to meet both its short-term and long-term peak power needs. Its evaluation of the proposals indicated that its long-term needs would best be met by constructing its own generation. By securing their own generation, ODEC's Member Cooperatives have insulated themselves from peak demand price volatility.

The Staff looked at the electric rates paid by retail customers of ODEC's Member Cooperatives, and the rates paid by Virginia Power's customers. Mr. Tufaro found that the Facility is unlikely to impact base rates paid by retail customers of Member Cooperatives during the electric competition transition period. He found the Facility may impact ODEC's fuel cost and the WPCA factor paid by customers who purchase electricity from Member Cooperatives, but the Facility should have a smaller impact on the WPCAs of the Member Cooperatives than any of the other proposals considered by ODEC. Mr. Tufaro stated it is unclear how the Facility will impact Member Cooperatives' rates for default service after the expiration of capped rates. Since ODEC is responsible for the up-front and ongoing costs associated with the interconnection of the Facility to Virginia Power's transmission system, Mr. Tufaro believes the Facility should have no impact on Virginia Power's retail rates.

I find the proposed Facility will have no material adverse effect on electric rates paid by retail customers of ODEC Member Cooperatives, or by retail customers of Virginia Power. By controlling additional generation, particularly a peaking facility, ODEC has the ability to better manage peak demand price volatility by controlling the supply side of the supply/demand price equation. Given the price volatility problems experienced in the deregulated electric markets in California, this may prove to be an extremely sound business decision.

### D. Environment.

- 1. Air Quality.
  - a. Current Air Quality.

The current air quality in the County is good and is in attainment of the NAAQS. The only criteria pollutant to measure over 50% of the NAAQS during the last five years was ozone, which

measured 96% of the standard. The measured concentrations for ozone and the other criteria pollutants are set forth in the table below:

Worst-Case Background Air Quality for Fauquier County and the Surrounding Counties

POLLUTANT	AVERAGING PERIOD	NAAQS	MAXIMUM MONITORED CONC.	YEAR	LOCATION	PERCENTAGE OF NAAQS
					Prince William	
$NO_2$	Annual	$100  \mu g/m^3$	$29 \mu g/m^3$	1998	Co	29%
Ozone	1-hour	125 ppb	120 ppb	1999	Stafford Co	96%
$PM_{10}$	Annual	$50 \mu\text{g/m}^3$	$20 \mu g/m^3$	1999	Fairfax Co	40%
	24-hour	$150 \mu g/m^3$	$56 \mu g/m^3$	1999	Fairfax Co	37%
$SO_2$	Annual	$80  \mu g/m^3$	$16 \mu g/m^3$	1997/2000	Fairfax Co	20%
	24-hour	$365 \mu g/m^3$	$86 \mu g/m^3$	1996	Fairfax Co	24%
	3-hour	$1300  \mu g/m^3$	$94 \mu g/m^{3}$	1996	Fairfax Co	7%
CO	8-hour	$10,000  \mu g/m^3$	$2,330 \mu g/m^3$	1996	Fairfax Co	23%
	1-hour	$40,000 \ \mu g/m^3$	$6,640 \ \mu g/m^3$	1996	Fairfax Co	17%

# b. Cumulative Air Impacts.

Old Dominion had two cumulative air impact studies done for the Facility. The first study looked at the combined effect of the Facility's emissions with those of the neighboring Virginia Power facility. This study showed that the maximum combined emissions of both facilities would not cause a violation of any NAAQS. The second study looked at the combined effect of the Facility's emissions with those of 22 other proposed electric generating facilities. This study showed that the maximum combined emissions of the 23 facilities would also not cause a violation of any NAAQS.

The reason the combined effect of the 23 facilities is not greater is the impact of dispersion. Mr. Greywall explained that as the distance from an electric generation facility increases, the level of pollutants drastically decreases. The pollutants are absorbed by the atmosphere and dispersed over a wider geographical area. Mr. Greywall testified that even if the plumes of all 23 facilities converged at the same point in the landscape, there would not be a violation of any NAAQS. The highest concentrations of criteria pollutants occur at the facilities themselves. By the time the pollutants converge at any other points in the landscape, the concentrations are much smaller than they would be at any one facility. For this reason, the large acreage business model for locating electric generating facilities may have merit. The buffer not only reduces the visual and sound impact of a facility, but also reduces the impact of the facility's pollution on the surrounding community. It appears that the Facility will have a negligible impact on air quality.

#### c. Revised Standards.

Mr. Greywall addressed the new NAAQS for ozone and particulate matter. Mr. Greywall explained that the new 8-hour standard for ozone is law, but the EPA has yet to develop regulations to enforce or implement the law. He stated that the EPA must determine the existing air quality in

relation to the 8-hour standard; determine which regulations may have an effect on ozone; and determine the impact of these regulations in reducing ground-level ozone. He estimated that it may be 2006 or 2007 before the 8-hour standard is fully implemented. Mr. Greywall opined that for the three most recent years of data, using the 8-hour standard, the County would still have been in attainment of the NAAQS. He does not believe the Facility will cause or contribute to a violation of the new 8-hour standard.

Mr. Greywall explained that DEQ is presently assessing existing air quality in Virginia using the new PM<sub>2.5</sub> standard, although it has not yet requested that facilities submit data at the PM<sub>2.5</sub> level. Mr. Greywall believes there is no satisfactory quantitative assessment available to measure the impact of the Facility and the other 22 proposed facilities on PM<sub>2.5</sub>, and there is insufficient data to determine the impact the facilities will have on PM<sub>2.5</sub>. However, Mr. Greywall believes that displacing older coal-fired electric generating plants with cleaner burning natural gas facilities will reduce the levels of PM<sub>2.5</sub> in the air.

Given the undeveloped regulatory guidelines for both standards, and no means of enforcing either standard, the Commission should not apply either standard in this case, but should work with DEQ to accelerate the implementation of each standard. It appears sufficient monitoring data is in place to implement the new 8-hour ozone standard in short order. However, at least three years of data would need to be collected before the  $PM_{2.5}$  standard could be implemented. Currently, DEQ's air quality monitors do not measure  $PM_{2.5}$ . These monitors would have to be upgraded to collect the necessary data and then the data would have to be analyzed.

## d. Effect of NO<sub>x</sub> SIP Call and Related Programs.

Mr. Greywall addressed the NO<sub>x</sub> SIP Call, the Acid Rain Prevention Program, and the Regional Haze Program. The NO<sub>x</sub> SIP Call is scheduled to be implemented in May 2004, and predictions are it will reduce NO<sub>x</sub> emission in Virginia by 100,000 tons per year from all Virginia sources. For the 22 eastern states covered by the NO<sub>x</sub> SIP Call, the estimated reduction in NO<sub>x</sub> emissions is over 1,000,000 tons. Without the NO<sub>x</sub> SIP Call, the allowed emissions from large electric generating facilities in Virginia would be about 41,000 tons per ozone season by 2007. Beginning in May 2004, DEQ will allocate a total of 17,091 tons per ozone season to all existing and new large electric generating units. The 17,091 ton budget applies no matter how many electric generating facilities are built. Under Virginia law, any facility that commences operation from January 1, 1998 to January 1, 2009, will have to share in a total new set aside of 855 tons. Since all existing electric generation facilities must operate within the overall NO<sub>x</sub> budget, Mr. Greywall believes it will be the new gas-fired facilities that will allow Virginia to meet its future energy needs and still be within its budget. The practical effect of the NO<sub>x</sub> SIP Call on the air in the County would be to reduce the predicted ozone reading (23 proposed facilities) from 123 parts per billion to 109 parts per billion (Background Concentration of 120 ppb + Cumulative Impact of 3 ppb -Predicted NO<sub>x</sub> SIP Call Reduction of 14 ppb). Mr. Greywall believes the NO<sub>x</sub> SIP Call predicted range of impact will be a 14 to 18 parts per billion reduction in observed ozone readings, and he used the more conservative assumption in his analysis.

The Acid Rain Prevention Program has done for  $SO_2$  emissions what the EPA wants to achieve with  $NO_x$  emissions. The EPA established a cap and trade program for  $SO_2$  emissions. The cap was set so that facilities could not continue to operate unless they either acquired allowances from someone else or reduced their  $SO_2$  emissions. Each year the amount of available allowances decreases. In response to the Acid Rain Prevention Program, the electric generation industry has "over controlled." It has reduced emissions more than required by the budget in order to generate allowances that can be sold. Mr. Greywall expects the  $NO_x$  SIP Call to produce the same results.

The Regional Haze Program was established to address visibility impairment in 156 national parks and wilderness areas. States are required to establish goals to improve visibility on the haziest days and ensure that visibility on the clearest days is not degraded. The states are to use enforceable measures to address emissions from mobile and stationary sources. Specifically, states must require facilities placed in service between 1962 and 1977 to use best available retrofit technology. The states must submit plans to implement the requirements in attainment areas between 2004 and 2006.

With two of the three programs mentioned by Mr. Greywall not yet implemented, any opinion as to the air quality improvements that will be achieved under either program is pure speculation. There is no guaranty that either program will be ultimately implemented in its current form. The Commission should, therefore, not rely on theoretical improvements in air quality to determine whether to approve an application for an electric generating facility. In this case, even if the Commission does not consider the predicted benefits of the  $NO_x$  SIP Call and the Regional Haze Program, the bottom line is the Facility's emissions do not adversely affect air quality in the County and will not lead to a violation of any NAAQS.

## e. NO<sub>x</sub> Emissions Allowances.

As part of the County's Special Exception, Old Dominion must obtain one-for-one  $NO_x$  offsets during the ozone season (May through September) from an area that will benefit the County's air quality. The question has arisen where those offsets should come from. Mr. Greywall testified that ozone formation is a regional problem, and because of this, the EPA will allow a certain percentage of  $NO_x$  trading to be interstate. He did not know the exact percentage of interstate trades that would be allowed under the  $NO_x$  SIP Call program; however, he explained that interstate  $NO_x$  trading would still benefit the air quality in the County and Virginia. Since ozone formation is a regional problem, I see no reason to impose any additional restrictions, beyond what is already required under the  $NO_x$  SIP Call, on where Old Dominion should obtain its  $NO_x$  offsets.

## 2. Water Consumption.

Water consumption at the Facility should not be an issue. The County's municipal wastewater system will provide process water for the production of electricity. Potable water for the three to five employees at the Facility will be provided by an on-site well. The water use for these employees is expected to be less than that of an average family.

## E. Economic Development.

Both Old Dominion and the Staff agree that the Facility will be an economic benefit to the County. Staff witness Stavrou estimated that Old Dominion would pay approximately \$2.2 million in property taxes per year to the County. Old Dominion expects to pay about \$24 million in payroll to construct the Facility. Annual payroll for the three to five workers at the Facility should average \$400,000. Old Dominion intends to purchase locally approximately \$1.25 million in materials for the Facility. Mr. Stavrou estimated the Facility's indirect economic benefit to the County to be about \$63 million.

Perhaps the most compelling testimony came from one of the public witnesses. Mr. Meadows testified that it would take 1,400 new businesses to locate in the County, with each business grossing \$1 million annually, to equal the yearly tax revenue generated by the Facility. With those 1,400 new businesses would come approximately 280,000 new residences to the County that would have to be provided County services. The Facility will provide revenue to the County without having a corresponding drain on County services. I find the Facility will have no material adverse effect on economic development.

#### F. Public Interest.

# 1. Visual Impacts.

Old Dominion has sought to minimize the visual impact of the Facility. As part of its Special Exception, Old Dominion must maintain the vegetative buffer areas on the project site and plant 100-foot buffer areas where none presently exist to screen the Facility from the surrounding residential homes. Only the tops of the 90-foot stacks should be visible from a few surrounding homes, and Old Dominion has agreed to paint the stacks a muted color to lessen their visual impact. Old Dominion will also design the outdoor lighting at the Facility to minimize the impact on the surrounding area. I find that the Facility will have no material adverse visual impact on the surrounding area.

### 2. Gas and Wastewater Pipeline Routes.

Old Dominion has not determined the final routes for the gas and wastewater supply pipelines. It has indicated that it would attempt to follow existing rights-of-way and configure the routes in a manner to mitigate impacts on the property of the residents in the area. The Transco natural gas transmission line is located in close proximity to the plant site to the southeast. The gas distribution line for the Facility could easily follow the Virginia Power transmission line right-of-way that traverses through the plant site. The wastewater pipeline should be able to follow existing VDOT right-of-way for the majority of the route between Remington and the Facility. Old Dominion should be able, without much difficulty, to design the routes for the two pipelines to minimize their impact on surrounding property owners. It is unclear whether the pipelines will impact any of the cultural resources found on the 28-acre site. The plan of avoidance filed by Old Dominion with VDHR should resolve this issue.

#### 3. Fuel Oil Use.

In its PSD permit application, Old Dominion has requested to burn fuel oil up to 130 hours per year. This equates to a little over five days during a calendar year. Since the Facility will operate as a peaking power plant, it should have a back-up fuel oil capability. The Facility must be available for immediate dispatch and there may be times during the winter electric peak when natural gas may not be available. The oil storage tanks at the Facility will be designed to meet the Virginia Above Ground Storage Tank Regulations. The tanks will have an impervious secondary containment and a leak detection system. The Facility will also have in place a Spill Prevention Control and Countermeasure Plan. I find the Facility's use of fuel oil is not contrary to the public interest.

## Columbia Gas Stipulation

Columbia Gas and Marsh Run filed a Stipulation in the case for the Commission's consideration. The Stipulation recognizes that:

- (1) Columbia Gas will hold a certificate of public convenience and necessity from the Commission to provide natural gas service in the County, including the proposed location of the Facility.
- (2) Natural gas for the Facility will be supplied through the distribution and/or transmission facilities ("Gas Lateral") of either Transcontinental Gas Pipe Line Company ("Transco") or Columbia Gas.
- (3) The specific ownership and the route of the Gas Lateral has not yet been determined.
- (4) Marsh Run will construct, own, and operate piping between the meter stations and the Facility ("Plant Piping") for the natural gas fuel for the Facility. The Plant Piping will be located wholly on property owned by Marsh Run and is considered part of the Facility. Marsh Run shall not, without further Commission approval, use the Plant Piping to serve any other facilities except for additional generation units added to the Facility.
- (5) Marsh Run and/or ODEC will request that the Commission recognize that the Plant Piping is part of the Facility to be certificated in this proceeding.
- (6) Columbia Gas will not oppose the construction, ownership, and operation of the Plant Piping by Marsh Run for the natural gas fuel for the Facility, or the Commission's certification of the Facility.
- (7) Columbia Gas will not oppose Transco's construction, ownership, and operation of the Gas Lateral and meter stations.

(8) In the event the Gas Lateral is to be owned by an entity other that Transco, Marsh Run and/or ODEC will notify the Commission or, if required by law, request prior approval from the Commission for the certification of such pipeline facilities. Marsh Run and/or ODEC will serve a copy of any such application for approval upon Columbia Gas contemporaneously with the filing of such application with the Commission, or in the event notice is to served, Marsh Run and/or ODEC will serve such notice on Columbia Gas at least 60 days prior to the construction of the Gas Lateral.

#### Ex. 1.

The Staff had no objection to the Stipulation.

The Stipulation between Columbia Gas and Marsh Run protects Columbia Gas's certificate of public convenience and necessity by precluding Marsh Run from using natural gas facilities constructed to serve the Facility from serving any other entity, unless approval is sought from the Commission where Columbia Gas would have an opportunity to appear and be heard. Marsh Run retains the flexibility to obtain its natural gas supplies directly from an interstate natural gas pipeline company. The Stipulation reasonably protects the interests of each party. I recommend the Commission adopt the Stipulation.

## FINDINGS AND RECOMMENDATIONS

Based on the evidence in the record, and for the reasons set forth above I find that:

- (1) The proposed Facility will have no material adverse effect on reliability;
- (2) The proposed Facility will have no material adverse effect on competition;
- (3) The proposed Facility will have no material adverse effect on retail electric, natural gas, water, or sewer rates;
- (4) The proposed Facility will have no material adverse effect on any threatened or endangered plant or animal species, any wetlands, air quality, water resources, or the environment generally;
  - (5) The proposed Facility will have no material adverse effect on economic development;
- (6) The proposed Facility will have no material adverse visual impact on the surrounding area:
- (7) There is insufficient evidence in the record to determine whether the proposed Facility, and its associated facilities, may have a material adverse effect on cultural resources, and thereby, the public interest. The Commission should require Old Dominion to file with the Commission a

copy of the plan of avoidance that it filed with the VDHR, and, pursuant to § 56-580 D, as amended, the Commission should obtain VDHR's concurrence in the plan of avoidance;

- (8) The proposed Facility's use of fuel oil is not contrary to the public interest;
- (9) The Commission should incorporate the stipulation entered into between Old Dominion and Columbia in any CPCN issued in this case; and
- (10) The Commission should include a sunset provision in any CPCN issued in this case that the CPCN will expire if construction has not commenced within two years from the date of issuance.

I therefore **RECOMMEND** that the Commission enter an order that:

- (1) **ADOPTS** the findings contained in this Report; and
- (2) *GRANTS* Marsh Run approval pursuant to § 56-580 D of the Code of Virginia to construct and operate the Facility after the requirements in Paragraph (7) above have been satisfied.<sup>20</sup>

### **COMMENTS**

The parties are advised that any comments (Section 12.1-31 of the Code of Virginia and 5 VAC 5-20-120 C) to this Report must be filed with the Clerk of the Commission in writing, in an original and fifteen (15) copies, within twenty-one (21) days from the date hereof. The mailing address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been mailed or delivered to all counsel of record and any such party not represented by counsel.

<sup>&</sup>lt;sup>20</sup>For the reasons outlined in Footnote 1, the CPCN should be issued to Marsh Run, not ODEC. In every other case to come before the Commission, except ODEC's Louisa County generation facility, the special purpose entity established to develop the generation facility has been the entity that received the CPCN. *See*, *Application of Wolf Hills Energy*, *LLC*, Case No. PUE-1999-00785, 2000 S.C.C. Ann. Rep. 469; *See also*, *Application of Tenaska Virginia Partners*, *L.P.*, Case No. PUE-2001-00039, Final Order (April 19, 2002), and *Application of Buchanan Generation*, *LLC*, Case No. PUE-2001-00657, Final Order (June 25, 2002).